Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Uncontaminated Soil Certification
by Licensed Professional Engineer or Licensed Professional Geologist
for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as
amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAP 351 (US 6 / IL 7) Office Phone Number, if available:

Physical Site Location (address, including number and street):
10000-10600 blocks of West 159th Street (south side of 159th Street between 104th Avenue and South Ravinia Avenue)

City: Orland Park State: IL Zip Code: 60467

County: Cook Township: Orland

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

Latitude: 41.60099 (Decimal Degrees) Longitude: -87.86681 (-Decimal Degrees)

Identify how the lat/long data were determined:

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

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

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

Estimated Volume of debris (cu. Yd.): 208

II. Owner/Operator Information for Source Site

Site Owner

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

Site Operator

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

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

Project Name: FAP 351 (US 6 / IL 7) Latitude: 41.60099 Longitude: - 87.86681

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 846V2-174-B01, 846V2-174-B02, 846V2-174-B03, 846V2-174-B04 AND 846V2-174-B05 WERE SAMPLED ADJACENT TO SITE 846V2-174. SEE TABLE 3 AND FIGURE 2 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS/TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID NUMBERS: 500-209247-1 AND 500-209899-1.

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

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

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

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

Savo Radulovic
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

Jan 24, 2022
Date:

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

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

- Only parameters reported at concentrations above the most stringent MAC are listed.

- Samples with the notation **“No Contaminants of Concern Noted”** were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

ANALYTICAL PARAMETERS

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

ISGS Site 846V2-174
Agricultural Land

Sample ID	846V2-174-B01		846V2-174-B02		846V2-174-B03		846V2-174-B03 DUP		**Maximum Allowable Concentration**				
Sample Depth (ft)	0-5		0-5		0-5		0-5						
Sample Date	12/2/2021		12/2/2021		12/2/2021		12/2/2021						
PID	0		0		0		0						
Sample pH	8		8.5		8.6		8.5		[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil		Soil		Soil		Soil						
Semivolatile Organic Compounds (mg/kg)													
Benzo(a)pyrene	**0.065**		**0.29**	**1,2**	**0.36**	**1,2**	**0.26**	**1,2**	0.09	0.09	0.98	1.3	2.1
Dibenzo(a,h)anthracene	ND		**0.28**	**1,2,3,4**	**0.29**	**1,2,3,4**	**0.27**	**1,2,3,4**	0.09	0.09	0.15	0.2	0.42

Sample ID	846V2-174-B04		846V2-174-B05		**Maximum Allowable Concentration**				
Sample Depth (ft)	0-5		0-5						
Sample Date	12/16/2021		12/16/2021						
PID	0		0						
Sample pH	8.1		7.3		[1] Most Stringent	[2] Outside a Populated Area	[3] Within a Populated non-Metropolitan Statistical Area	[4] Within Chicago Corporate Limits	[5] Within a Metropolitan Statistical Area
Matrix	Soil		Soil						
Semivolatile Organic Compounds (mg/kg)									
Benzo(a)pyrene	ND		**0.043**		0.09	0.09	0.98	1.3	2.1
Dibenzo(a,h)anthracene	ND		ND		0.09	0.09	0.15	0.2	0.42

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 500-209247-1
Client Project/Site: IDOT - AE7-052

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

Attn: Ms. Colleen Grey

Authorized for release by:
12/21/2021 4:27:13 PM

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

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209247-1

Client Sample ID: 846V2-174-B01
Date Collected: 12/02/21 10:00
Date Received: 12/03/21 10:40

Lab Sample ID: 500-209247-1
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
2-Butanone (MEK)	**0.0074**		0.0042	0.0019	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Acetone	**0.056**		0.017	0.0073	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/03/21 17:45	12/07/21 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*130*		*70 - 134*	*12/03/21 17:45*	*12/07/21 14:46*	*1*
4-Bromofluorobenzene (Surr)	*109*		*75 - 131*	*12/03/21 17:45*	*12/07/21 14:46*	*1*
Dibromofluoromethane	*121*		*75 - 126*	*12/03/21 17:45*	*12/07/21 14:46*	*1*
Toluene-d8 (Surr)	*106*		*75 - 124*	*12/03/21 17:45*	*12/07/21 14:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1

Client Sample ID: 846V2-174-B01

Date Collected: 12/02/21 10:00
Date Received: 12/03/21 10:40

Lab Sample ID: 500-209247-1

Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
2-Methylnaphthalene	**0.0079**	**J**	0.076	0.0069	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Benzo[a]anthracene	**0.017**	**J**	0.037	0.0050	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Benzo[a]pyrene	**0.065**		0.037	0.0073	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Benzo[b]fluoranthene	**0.083**		0.037	0.0081	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Benzo[g,h,i]perylene	**0.041**		0.037	0.012	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Benzo[k]fluoranthene	**0.017**	**J**	0.037	0.011	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Chrysene	**0.036**	**J**	0.037	0.010	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Fluoranthene	**0.047**		0.037	0.0070	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209247-1

Client Sample ID: 846V2-174-B01
Date Collected: 12/02/21 10:00
Date Received: 12/03/21 10:40

Lab Sample ID: 500-209247-1
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**0.051**		0.037	0.0097	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Phenanthrene	**0.022**	**J**	0.037	0.0052	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1
Pyrene	**0.049**		0.037	0.0075	mg/Kg	☼	12/09/21 06:40	12/15/21 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*81*		*31 - 143*	*12/09/21 06:40*	*12/15/21 14:06*	*1*
2-Fluorobiphenyl	*68*		*43 - 145*	*12/09/21 06:40*	*12/15/21 14:06*	*1*
2-Fluorophenol	*91*		*31 - 166*	*12/09/21 06:40*	*12/15/21 14:06*	*1*
Nitrobenzene-d5 (Surr)	*52*		*37 - 147*	*12/09/21 06:40*	*12/15/21 14:06*	*1*
Phenol-d5	*77*		*30 - 153*	*12/09/21 06:40*	*12/15/21 14:06*	*1*
Terphenyl-d14 (Surr)	*99*		*42 - 157*	*12/09/21 06:40*	*12/15/21 14:06*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.69**	**J**	1.2	0.23	mg/Kg	☼	12/14/21 11:20	12/17/21 02:00	1
Arsenic	**7.1**		0.60	0.20	mg/Kg	☼	12/14/21 11:20	12/17/21 02:00	1
Barium	**44**		0.60	0.068	mg/Kg	☼	12/14/21 11:20	12/17/21 18:29	1
Beryllium	**0.61**		0.24	0.056	mg/Kg	☼	12/14/21 11:20	12/17/21 02:00	1
Boron	**9.8**		3.0	0.28	mg/Kg	☼	12/14/21 11:20	12/17/21 18:29	1
Cadmium	**0.30**	**B**	0.12	0.021	mg/Kg	☼	12/14/21 11:20	12/17/21 02:00	1
Calcium	**100000**	**B**	60	10	mg/Kg	☼	12/14/21 11:20	12/17/21 18:32	5
Chromium	**13**	**B**	0.60	0.29	mg/Kg	☼	12/14/21 11:20	12/17/21 02:00	1
Cobalt	**11**		0.30	0.078	mg/Kg	☼	12/14/21 11:20	12/17/21 18:29	1
Copper	**18**		0.60	0.17	mg/Kg	☼	12/14/21 11:20	12/17/21 02:00	1
Iron	**18000**	**^2**	60	31	mg/Kg	☼	12/14/21 11:20	12/17/21 18:32	5
Lead	**11**		0.30	0.14	mg/Kg	☼	12/14/21 11:20	12/17/21 02:00	1
Magnesium	**56000**		30	15	mg/Kg	☼	12/14/21 11:20	12/17/21 18:32	5
Manganese	**400**		0.60	0.086	mg/Kg	☼	12/14/21 11:20	12/17/21 02:00	1
Nickel	**25**		0.60	0.17	mg/Kg	☼	12/14/21 11:20	12/17/21 02:00	1
Potassium	**2100**		30	11	mg/Kg	☼	12/14/21 11:20	12/17/21 02:00	1
Selenium	<0.60		0.60	0.35	mg/Kg	☼	12/14/21 11:20	12/17/21 18:29	1
Silver	**0.40**		0.30	0.077	mg/Kg	☼	12/14/21 11:20	12/17/21 02:00	1
Sodium	**330**		60	8.8	mg/Kg	☼	12/14/21 11:20	12/17/21 02:00	1
Thallium	<0.60		0.60	0.30	mg/Kg	☼	12/14/21 11:20	12/17/21 18:29	1
Vanadium	**17**		0.30	0.070	mg/Kg	☼	12/14/21 11:20	12/17/21 02:00	1
Zinc	**49**		1.2	0.52	mg/Kg	☼	12/14/21 11:20	12/17/21 02:00	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		12/09/21 07:53	12/21/21 13:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/09/21 07:53	12/21/21 13:21	1
Chromium	<0.025		0.025	0.010	mg/L		12/09/21 07:53	12/21/21 13:21	1
Iron	**0.26**	**J**	0.40	0.20	mg/L		12/09/21 07:53	12/21/21 13:21	1

Client Sample ID: 846V2-174-B01

Date Collected: 12/02/21 10:00
Date Received: 12/03/21 10:40

Lab Sample ID: 500-209247-1

Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		12/09/21 07:53	12/21/21 13:21	1
Manganese	**3.0**		0.025	0.010	mg/L		12/09/21 07:53	12/21/21 13:21	1
Nickel	**0.023**	**J**	0.025	0.010	mg/L		12/09/21 07:53	12/21/21 13:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.080**		0.050	0.010	mg/L		12/16/21 08:44	12/20/21 15:52	1
Barium	**0.47**	**J**	0.50	0.050	mg/L		12/16/21 08:44	12/20/21 15:52	1
Beryllium	**0.0050**		0.0040	0.0040	mg/L		12/16/21 08:44	12/20/21 15:52	1
Boron	**0.31**	**B**	0.20	0.050	mg/L		12/16/21 08:44	12/20/21 15:52	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/16/21 08:44	12/20/21 15:52	1
Calcium	**46**		2.5	0.50	mg/L		12/16/21 08:44	12/20/21 15:52	1
Chromium	**0.16**		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 15:52	1
Cobalt	**0.060**		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 15:52	1
Iron	**180**	**^2**	0.40	0.20	mg/L		12/16/21 08:44	12/20/21 15:52	1
Lead	**0.10**		0.0075	0.0075	mg/L		12/16/21 08:44	12/20/21 15:52	1
Manganese	**1.1**		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 15:52	1
Nickel	**0.19**		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 15:52	1
Potassium	**32**		2.5	0.50	mg/L		12/16/21 08:44	12/20/21 15:52	1
Selenium	<0.050		0.050	0.020	mg/L		12/16/21 08:44	12/20/21 15:52	1
Silver	<0.025		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 15:52	1
Zinc	**0.44**	**J**	0.50	0.020	mg/L		12/16/21 08:44	12/20/21 15:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		12/09/21 07:53	12/20/21 12:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/16/21 08:44	12/17/21 13:11	1
Thallium	**0.0032**		0.0020	0.0020	mg/L		12/16/21 08:44	12/17/21 15:00	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		12/09/21 12:05	12/10/21 10:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.019**		0.019	0.0063	mg/Kg	☼	12/09/21 13:40	12/10/21 08:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.28		0.28	0.14	mg/Kg	☼	12/12/21 12:06	12/12/21 13:41	1
pH	**8.0**		0.2	0.2	SU			12/08/21 17:30	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209247-1

Client Sample ID: 846V2-174-B02
Date Collected: 12/02/21 10:30
Date Received: 12/03/21 10:40

Lab Sample ID: 500-209247-2
Matrix: Solid
Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
2-Butanone (MEK)	**0.0045**		0.0042	0.0019	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Acetone	**0.036**		0.017	0.0073	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	12/03/21 17:45	12/07/21 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*127*		*70 - 134*	*12/03/21 17:45*	*12/07/21 15:12*	*1*
4-Bromofluorobenzene (Surr)	*109*		*75 - 131*	*12/03/21 17:45*	*12/07/21 15:12*	*1*
Dibromofluoromethane	*117*		*75 - 126*	*12/03/21 17:45*	*12/07/21 15:12*	*1*
Toluene-d8 (Surr)	*109*		*75 - 124*	*12/03/21 17:45*	*12/07/21 15:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.94		0.94	0.20	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
1,2-Dichlorobenzene	<0.94		0.94	0.22	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
1,3-Dichlorobenzene	<0.94		0.94	0.21	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
1,4-Dichlorobenzene	<0.94		0.94	0.24	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
2,2'-oxybis[1-chloropropane]	<0.94		0.94	0.22	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5

Client Sample ID: 846V2-174-B02
Date Collected: 12/02/21 10:30
Date Received: 12/03/21 10:40

Lab Sample ID: 500-209247-2
Matrix: Solid
Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<1.9		1.9	0.43	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
2,4,6-Trichlorophenol	<1.9		1.9	0.64	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
2,4-Dichlorophenol	<1.9		1.9	0.44	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
2,4-Dimethylphenol	<1.9		1.9	0.71	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
2,4-Dinitrophenol	<3.8		3.8	3.3	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
2,4-Dinitrotoluene	<0.94		0.94	0.30	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
2,6-Dinitrotoluene	<0.94		0.94	0.37	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
2-Chloronaphthalene	<0.94		0.94	0.21	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
2-Chlorophenol	<0.94		0.94	0.32	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
2-Methylnaphthalene	<0.38		0.38	0.034	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
2-Methylphenol	<0.94		0.94	0.30	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
2-Nitroaniline	<0.94		0.94	0.25	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
2-Nitrophenol	<1.9		1.9	0.44	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
3 & 4 Methylphenol	<0.94		0.94	0.31	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
3,3'-Dichlorobenzidine	<0.94		0.94	0.26	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
3-Nitroaniline	<1.9		1.9	0.58	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
4,6-Dinitro-2-methylphenol	<3.8		3.8	1.5	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
4-Bromophenyl phenyl ether	<0.94		0.94	0.25	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
4-Chloro-3-methylphenol	<1.9		1.9	0.63	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
4-Chloroaniline	<3.8		3.8	0.88	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
4-Chlorophenyl phenyl ether	<0.94		0.94	0.22	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
4-Nitroaniline	<1.9		1.9	0.78	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
4-Nitrophenol	<3.8		3.8	1.8	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Acenaphthene	<0.19		0.19	0.034	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Acenaphthylene	<0.19		0.19	0.025	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Anthracene	<0.19		0.19	0.031	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Benzo[a]anthracene	**0.075**	**J**	0.19	0.025	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Benzo[a]pyrene	**0.29**		0.19	0.036	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Benzo[b]fluoranthene	**0.36**		0.19	0.040	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Benzo[g,h,i]perylene	**0.23**		0.19	0.060	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Benzo[k]fluoranthene	**0.078**	**J**	0.19	0.055	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Bis(2-chloroethoxy)methane	<0.94		0.94	0.19	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Bis(2-chloroethyl)ether	<0.94		0.94	0.28	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Bis(2-ethylhexyl) phthalate	<0.94		0.94	0.34	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Butyl benzyl phthalate	<0.94		0.94	0.35	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Carbazole	<0.94		0.94	0.47	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Chrysene	**0.10**	**J**	0.19	0.051	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Dibenz(a,h)anthracene	**0.28**		0.19	0.036	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Dibenzofuran	<0.94		0.94	0.22	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Diethyl phthalate	<0.94		0.94	0.32	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Dimethyl phthalate	<0.94		0.94	0.24	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Di-n-butyl phthalate	<0.94		0.94	0.28	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Di-n-octyl phthalate	<0.94		0.94	0.30	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Fluoranthene	**0.13**	**J**	0.19	0.035	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Fluorene	<0.19		0.19	0.026	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Hexachlorobenzene	<0.38		0.38	0.043	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Hexachlorobutadiene	<0.94		0.94	0.29	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Hexachlorocyclopentadiene	<3.8		3.8	1.1	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Hexachloroethane	<0.94		0.94	0.28	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5

Client Sample ID: 846V2-174-B02
Date Collected: 12/02/21 10:30
Date Received: 12/03/21 10:40

Lab Sample ID: 500-209247-2
Matrix: Solid
Percent Solids: 86.9

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	**0.23**		0.19	0.048	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Isophorone	<0.94		0.94	0.21	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Naphthalene	<0.19		0.19	0.029	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Nitrobenzene	<0.19		0.19	0.047	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
N-Nitrosodi-n-propylamine	<0.38		0.38	0.23	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
N-Nitrosodiphenylamine	<0.94		0.94	0.22	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Pentachlorophenol	<3.8		3.8	3.0	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Phenanthrene	**0.042**	**J**	0.19	0.026	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Phenol	<0.94		0.94	0.41	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5
Pyrene	**0.17**	**J**	0.19	0.037	mg/Kg	☼	12/09/21 06:40	12/15/21 14:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*99*		*31 - 143*	*12/09/21 06:40*	*12/15/21 14:30*	*5*
2-Fluorobiphenyl	*79*		*43 - 145*	*12/09/21 06:40*	*12/15/21 14:30*	*5*
2-Fluorophenol	*141*		*31 - 166*	*12/09/21 06:40*	*12/15/21 14:30*	*5*
Nitrobenzene-d5 (Surr)	*66*		*37 - 147*	*12/09/21 06:40*	*12/15/21 14:30*	*5*
Phenol-d5	*92*		*30 - 153*	*12/09/21 06:40*	*12/15/21 14:30*	*5*
Terphenyl-d14 (Surr)	*122*		*42 - 157*	*12/09/21 06:40*	*12/15/21 14:30*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.76**	**J**	1.1	0.21	mg/Kg	☼	12/14/21 11:20	12/17/21 02:03	1
Arsenic	**6.3**		0.53	0.18	mg/Kg	☼	12/14/21 11:20	12/17/21 02:03	1
Barium	**32**		0.53	0.061	mg/Kg	☼	12/14/21 11:20	12/17/21 18:36	1
Beryllium	**0.51**		0.21	0.050	mg/Kg	☼	12/14/21 11:20	12/17/21 02:03	1
Boron	**10**		2.7	0.25	mg/Kg	☼	12/14/21 11:20	12/17/21 18:36	1
Cadmium	**0.28**	**B**	0.11	0.019	mg/Kg	☼	12/14/21 11:20	12/17/21 02:03	1
Calcium	**92000**	**B**	53	9.1	mg/Kg	☼	12/14/21 11:20	12/17/21 18:39	5
Chromium	**11**	**B**	0.53	0.26	mg/Kg	☼	12/14/21 11:20	12/17/21 02:03	1
Cobalt	**9.1**		0.27	0.070	mg/Kg	☼	12/14/21 11:20	12/17/21 18:36	1
Copper	**16**		0.53	0.15	mg/Kg	☼	12/14/21 11:20	12/17/21 02:03	1
Iron	**15000**	**^2**	53	28	mg/Kg	☼	12/14/21 11:20	12/17/21 18:39	5
Lead	**12**		0.27	0.12	mg/Kg	☼	12/14/21 11:20	12/17/21 02:03	1
Magnesium	**54000**		27	13	mg/Kg	☼	12/14/21 11:20	12/17/21 18:39	5
Manganese	**340**		0.53	0.077	mg/Kg	☼	12/14/21 11:20	12/17/21 02:03	1
Nickel	**22**		0.53	0.16	mg/Kg	☼	12/14/21 11:20	12/17/21 02:03	1
Potassium	**1900**		27	9.5	mg/Kg	☼	12/14/21 11:20	12/17/21 02:03	1
Selenium	**0.59**		0.53	0.31	mg/Kg	☼	12/14/21 11:20	12/17/21 18:36	1
Silver	**0.36**		0.27	0.069	mg/Kg	☼	12/14/21 11:20	12/17/21 02:03	1
Sodium	**390**		53	7.9	mg/Kg	☼	12/14/21 11:20	12/17/21 02:03	1
Thallium	<0.53		0.53	0.27	mg/Kg	☼	12/14/21 11:20	12/17/21 18:36	1
Vanadium	**14**		0.27	0.063	mg/Kg	☼	12/14/21 11:20	12/17/21 02:03	1
Zinc	**50**		1.1	0.47	mg/Kg	☼	12/14/21 11:20	12/17/21 02:03	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		12/09/21 07:53	12/21/21 13:34	1
Chromium	<0.025		0.025	0.010	mg/L		12/09/21 07:53	12/21/21 13:34	1
Iron	**0.22**	**J**	0.40	0.20	mg/L		12/09/21 07:53	12/21/21 13:34	1
Lead	<0.0075		0.0075	0.0075	mg/L		12/09/21 07:53	12/21/21 13:34	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209247-1

Client Sample ID: 846V2-174-B02
Date Collected: 12/02/21 10:30
Date Received: 12/03/21 10:40

Lab Sample ID: 500-209247-2
Matrix: Solid
Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	4.9		0.025	0.010	mg/L		12/09/21 07:53	12/21/21 13:34	1
Nickel	0.032		0.025	0.010	mg/L		12/09/21 07:53	12/21/21 13:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.057		0.050	0.010	mg/L		12/16/21 08:44	12/20/21 15:55	1
Barium	0.36	J	0.50	0.050	mg/L		12/16/21 08:44	12/20/21 15:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/16/21 08:44	12/20/21 15:55	1
Boron	0.32	B	0.20	0.050	mg/L		12/16/21 08:44	12/20/21 15:55	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/16/21 08:44	12/20/21 15:55	1
Calcium	34		2.5	0.50	mg/L		12/16/21 08:44	12/20/21 15:55	1
Chromium	0.12		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 15:55	1
Cobalt	0.057		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 15:55	1
Iron	130	^2	0.40	0.20	mg/L		12/16/21 08:44	12/20/21 15:55	1
Lead	0.12		0.0075	0.0075	mg/L		12/16/21 08:44	12/20/21 15:55	1
Manganese	1.3		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 15:55	1
Nickel	0.16		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 15:55	1
Potassium	28		2.5	0.50	mg/L		12/16/21 08:44	12/20/21 15:55	1
Selenium	<0.050		0.050	0.020	mg/L		12/16/21 08:44	12/20/21 15:55	1
Silver	<0.025		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 15:55	1
Zinc	0.37	J	0.50	0.020	mg/L		12/16/21 08:44	12/20/21 15:55	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		12/09/21 07:53	12/20/21 13:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/16/21 08:44	12/17/21 13:15	1
Thallium	0.0028		0.0020	0.0020	mg/L		12/16/21 08:44	12/17/21 15:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/09/21 12:05	12/10/21 10:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019		0.019	0.0062	mg/Kg	☼	12/09/21 13:40	12/10/21 09:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.24		0.24	0.12	mg/Kg	☼	12/14/21 14:15	12/14/21 16:02	1
pH	8.5		0.2	0.2	SU			12/08/21 17:32	1

Client Sample ID: 846V2-174-B03 **Lab Sample ID: 500-209247-3**
Date Collected: 12/02/21 11:00 **Matrix: Solid**
Date Received: 12/03/21 10:40 **Percent Solids: 90.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Acetone	**0.013**	**J**	0.015	0.0065	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	12/03/21 17:45	12/07/21 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*133*		*70 - 134*	*12/03/21 17:45*	*12/07/21 15:39*	*1*
4-Bromofluorobenzene (Surr)	*107*		*75 - 131*	*12/03/21 17:45*	*12/07/21 15:39*	*1*
Dibromofluoromethane	*118*		*75 - 126*	*12/03/21 17:45*	*12/07/21 15:39*	*1*
Toluene-d8 (Surr)	*108*		*75 - 124*	*12/03/21 17:45*	*12/07/21 15:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.89		0.89	0.19	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
1,2-Dichlorobenzene	<0.89		0.89	0.21	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
1,3-Dichlorobenzene	<0.89		0.89	0.20	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
1,4-Dichlorobenzene	<0.89		0.89	0.23	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
2,2'-oxybis[1-chloropropane]	<0.89		0.89	0.21	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209247-1

Client Sample ID: 846V2-174-B03
Date Collected: 12/02/21 11:00
Date Received: 12/03/21 10:40

Lab Sample ID: 500-209247-3
Matrix: Solid
Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<1.8		1.8	0.40	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
2,4,6-Trichlorophenol	<1.8		1.8	0.61	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
2,4-Dichlorophenol	<1.8		1.8	0.42	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
2,4-Dimethylphenol	<1.8		1.8	0.67	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
2,4-Dinitrophenol	<3.6		3.6	3.1	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
2,4-Dinitrotoluene	<0.89		0.89	0.28	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
2,6-Dinitrotoluene	<0.89		0.89	0.35	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
2-Chloronaphthalene	<0.89		0.89	0.20	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
2-Chlorophenol	<0.89		0.89	0.30	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
2-Methylnaphthalene	<0.36		0.36	0.033	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
2-Methylphenol	<0.89		0.89	0.28	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
2-Nitroaniline	<0.89		0.89	0.24	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
2-Nitrophenol	<1.8		1.8	0.42	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
3 & 4 Methylphenol	<0.89		0.89	0.30	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
3,3'-Dichlorobenzidine	<0.89		0.89	0.25	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
3-Nitroaniline	<1.8		1.8	0.55	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
4,6-Dinitro-2-methylphenol	<3.6		3.6	1.4	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
4-Bromophenyl phenyl ether	<0.89		0.89	0.23	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
4-Chloro-3-methylphenol	<1.8		1.8	0.60	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
4-Chloroaniline	<3.6		3.6	0.83	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
4-Chlorophenyl phenyl ether	<0.89		0.89	0.21	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
4-Nitroaniline	<1.8		1.8	0.74	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
4-Nitrophenol	<3.6		3.6	1.7	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Acenaphthene	<0.18		0.18	0.032	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Acenaphthylene	<0.18		0.18	0.023	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Anthracene	**0.031**	**J**	0.18	0.030	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Benzo[a]anthracene	**0.11**	**J**	0.18	0.024	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Benzo[a]pyrene	**0.36**	***3**	0.18	0.034	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Benzo[b]fluoranthene	**0.48**	***3**	0.18	0.038	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Benzo[g,h,i]perylene	**0.27**	***3**	0.18	0.057	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Benzo[k]fluoranthene	**0.10**	**J *3**	0.18	0.052	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Bis(2-chloroethoxy)methane	<0.89		0.89	0.18	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Bis(2-chloroethyl)ether	<0.89		0.89	0.27	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Bis(2-ethylhexyl) phthalate	<0.89		0.89	0.32	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Butyl benzyl phthalate	<0.89		0.89	0.34	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Carbazole	<0.89		0.89	0.44	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Chrysene	**0.15**	**J**	0.18	0.048	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Dibenz(a,h)anthracene	**0.29**	***3**	0.18	0.034	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Dibenzofuran	<0.89		0.89	0.21	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Diethyl phthalate	<0.89		0.89	0.30	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Dimethyl phthalate	<0.89		0.89	0.23	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Di-n-butyl phthalate	<0.89		0.89	0.27	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Di-n-octyl phthalate	<0.89		0.89	0.29	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Fluoranthene	**0.24**		0.18	0.033	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Fluorene	<0.18		0.18	0.025	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Hexachlorobenzene	<0.36		0.36	0.041	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Hexachlorobutadiene	<0.89		0.89	0.28	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Hexachlorocyclopentadiene	<3.6		3.6	1.0	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Hexachloroethane	<0.89		0.89	0.27	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209247-1

Client Sample ID: 846V2-174-B03
Date Collected: 12/02/21 11:00
Date Received: 12/03/21 10:40

Lab Sample ID: 500-209247-3
Matrix: Solid
Percent Solids: 90.1

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	0.30	*3	0.18	0.046	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Isophorone	<0.89		0.89	0.20	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Naphthalene	<0.18		0.18	0.027	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Nitrobenzene	<0.18		0.18	0.044	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
N-Nitrosodi-n-propylamine	<0.36		0.36	0.22	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
N-Nitrosodiphenylamine	<0.89		0.89	0.21	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Pentachlorophenol	<3.6		3.6	2.8	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Phenanthrene	0.12	J	0.18	0.025	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Phenol	<0.89		0.89	0.39	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5
Pyrene	0.26		0.18	0.035	mg/Kg	☼	12/09/21 06:40	12/15/21 14:53	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*88*		*31 - 143*	*12/09/21 06:40*	*12/15/21 14:53*	*5*
2-Fluorobiphenyl	*77*		*43 - 145*	*12/09/21 06:40*	*12/15/21 14:53*	*5*
2-Fluorophenol	*135*		*31 - 166*	*12/09/21 06:40*	*12/15/21 14:53*	*5*
Nitrobenzene-d5 (Surr)	*57*		*37 - 147*	*12/09/21 06:40*	*12/15/21 14:53*	*5*
Phenol-d5	*102*		*30 - 153*	*12/09/21 06:40*	*12/15/21 14:53*	*5*
Terphenyl-d14 (Surr)	*108*		*42 - 157*	*12/09/21 06:40*	*12/15/21 14:53*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.74	J	1.1	0.21	mg/Kg	☼	12/14/21 11:20	12/17/21 02:06	1
Arsenic	6.3		0.55	0.19	mg/Kg	☼	12/14/21 11:20	12/17/21 02:06	1
Barium	50		0.55	0.063	mg/Kg	☼	12/14/21 11:20	12/17/21 18:42	1
Beryllium	0.69		0.22	0.051	mg/Kg	☼	12/14/21 11:20	12/17/21 02:06	1
Boron	12		2.7	0.26	mg/Kg	☼	12/14/21 11:20	12/17/21 18:42	1
Cadmium	0.30	B	0.11	0.020	mg/Kg	☼	12/14/21 11:20	12/17/21 02:06	1
Calcium	82000	B	55	9.3	mg/Kg	☼	12/14/21 11:20	12/17/21 18:45	5
Chromium	14	B	0.55	0.27	mg/Kg	☼	12/14/21 11:20	12/17/21 02:06	1
Cobalt	11		0.27	0.072	mg/Kg	☼	12/14/21 11:20	12/17/21 18:42	1
Copper	18		0.55	0.15	mg/Kg	☼	12/14/21 11:20	12/17/21 02:06	1
Iron	19000	^2	55	29	mg/Kg	☼	12/14/21 11:20	12/17/21 18:45	5
Lead	12		0.27	0.13	mg/Kg	☼	12/14/21 11:20	12/17/21 02:06	1
Magnesium	43000		27	14	mg/Kg	☼	12/14/21 11:20	12/17/21 18:45	5
Manganese	380		0.55	0.080	mg/Kg	☼	12/14/21 11:20	12/17/21 02:06	1
Nickel	26		0.55	0.16	mg/Kg	☼	12/14/21 11:20	12/17/21 02:06	1
Potassium	2500		27	9.7	mg/Kg	☼	12/14/21 11:20	12/17/21 02:06	1
Selenium	<0.55		0.55	0.32	mg/Kg	☼	12/14/21 11:20	12/17/21 18:42	1
Silver	0.47		0.27	0.071	mg/Kg	☼	12/14/21 11:20	12/17/21 02:06	1
Sodium	420		55	8.1	mg/Kg	☼	12/14/21 11:20	12/17/21 02:06	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	12/14/21 11:20	12/17/21 18:42	1
Vanadium	18		0.27	0.065	mg/Kg	☼	12/14/21 11:20	12/17/21 02:06	1
Zinc	52		1.1	0.48	mg/Kg	☼	12/14/21 11:20	12/17/21 02:06	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.21	J	0.40	0.20	mg/L		12/09/21 07:53	12/21/21 13:38	1
Lead	<0.015		0.015	0.015	mg/L		12/09/21 07:53	12/21/21 15:02	2
Manganese	1.5		0.025	0.010	mg/L		12/09/21 07:53	12/21/21 13:38	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209247-1

Client Sample ID: 846V2-174-B03

Date Collected: 12/02/21 11:00
Date Received: 12/03/21 10:40

Lab Sample ID: 500-209247-3

Matrix: Solid
Percent Solids: 90.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.018**	**J**	0.050	0.010	mg/L		12/16/21 08:44	12/20/21 15:58	1
Barium	**0.18**	**J**	0.50	0.050	mg/L		12/16/21 08:44	12/20/21 15:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/16/21 08:44	12/20/21 15:58	1
Boron	**0.30**	**B**	0.20	0.050	mg/L		12/16/21 08:44	12/20/21 15:58	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/16/21 08:44	12/20/21 15:58	1
Calcium	**27**		2.5	0.50	mg/L		12/16/21 08:44	12/20/21 15:58	1
Chromium	**0.058**		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 15:58	1
Cobalt	**0.013**	**J**	0.025	0.010	mg/L		12/16/21 08:44	12/20/21 15:58	1
Iron	**46**	**^2**	0.40	0.20	mg/L		12/16/21 08:44	12/20/21 15:58	1
Lead	**0.028**		0.0075	0.0075	mg/L		12/16/21 08:44	12/20/21 15:58	1
Manganese	**0.29**		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 15:58	1
Nickel	**0.048**		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 15:58	1
Potassium	**15**		2.5	0.50	mg/L		12/16/21 08:44	12/20/21 15:58	1
Selenium	<0.050		0.050	0.020	mg/L		12/16/21 08:44	12/20/21 15:58	1
Silver	<0.025		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 15:58	1
Zinc	**0.14**	**J**	0.50	0.020	mg/L		12/16/21 08:44	12/20/21 15:58	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		12/16/21 08:44	12/17/21 13:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		12/16/21 08:44	12/17/21 13:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/09/21 12:05	12/10/21 10:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.010**	**J**	0.017	0.0058	mg/Kg	☼	12/09/21 13:40	12/10/21 09:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.23		0.23	0.11	mg/Kg	☼	12/14/21 14:15	12/14/21 16:04	1
pH	**8.6**		0.2	0.2	SU			12/08/21 17:34	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209247-1

Client Sample ID: 846V2-174-B03 Dup

Date Collected: 12/02/21 11:10
Date Received: 12/03/21 10:40

Lab Sample ID: 500-209247-4

Matrix: Solid
Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
2-Butanone (MEK)	**0.0018**	**J**	0.0040	0.0018	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Acetone	**0.018**		0.016	0.0070	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	12/03/21 17:45	12/07/21 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*128*		*70 - 134*	*12/03/21 17:45*	*12/07/21 16:04*	*1*
4-Bromofluorobenzene (Surr)	*109*		*75 - 131*	*12/03/21 17:45*	*12/07/21 16:04*	*1*
Dibromofluoromethane	*117*		*75 - 126*	*12/03/21 17:45*	*12/07/21 16:04*	*1*
Toluene-d8 (Surr)	*107*		*75 - 124*	*12/03/21 17:45*	*12/07/21 16:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.93		0.93	0.20	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
1,2-Dichlorobenzene	<0.93		0.93	0.22	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
1,3-Dichlorobenzene	<0.93		0.93	0.21	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
1,4-Dichlorobenzene	<0.93		0.93	0.24	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
2,2'-oxybis[1-chloropropane]	<0.93		0.93	0.21	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209247-1

Client Sample ID: 846V2-174-B03 Dup
Date Collected: 12/02/21 11:10
Date Received: 12/03/21 10:40

Lab Sample ID: 500-209247-4
Matrix: Solid
Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<1.8		1.8	0.42	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
2,4,6-Trichlorophenol	<1.8		1.8	0.63	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
2,4-Dichlorophenol	<1.8		1.8	0.44	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
2,4-Dimethylphenol	<1.8		1.8	0.70	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
2,4-Dinitrophenol	<3.7		3.7	3.3	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
2,4-Dinitrotoluene	<0.93		0.93	0.29	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
2,6-Dinitrotoluene	<0.93		0.93	0.36	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
2-Chloronaphthalene	<0.93		0.93	0.20	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
2-Chlorophenol	<0.93		0.93	0.32	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
2-Methylnaphthalene	<0.37		0.37	0.034	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
2-Methylphenol	<0.93		0.93	0.30	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
2-Nitroaniline	<0.93		0.93	0.25	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
2-Nitrophenol	<1.8		1.8	0.44	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
3 & 4 Methylphenol	<0.93		0.93	0.31	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
3,3'-Dichlorobenzidine	<0.93		0.93	0.26	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
3-Nitroaniline	<1.8		1.8	0.57	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
4,6-Dinitro-2-methylphenol	<3.7		3.7	1.5	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
4-Bromophenyl phenyl ether	<0.93		0.93	0.24	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
4-Chloro-3-methylphenol	<1.8		1.8	0.63	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
4-Chloroaniline	<3.7		3.7	0.87	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
4-Chlorophenyl phenyl ether	<0.93		0.93	0.22	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
4-Nitroaniline	<1.8		1.8	0.77	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
4-Nitrophenol	<3.7		3.7	1.8	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Acenaphthene	<0.18		0.18	0.033	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Acenaphthylene	<0.18		0.18	0.024	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Anthracene	<0.18		0.18	0.031	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Benzo[a]anthracene	**0.070**	**J**	0.18	0.025	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Benzo[a]pyrene	**0.26**	***3**	0.18	0.036	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Benzo[b]fluoranthene	**0.30**	***3**	0.18	0.040	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Benzo[g,h,i]perylene	**0.20**	***3**	0.18	0.060	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Benzo[k]fluoranthene	**0.060**	**J *3**	0.18	0.054	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Bis(2-chloroethoxy)methane	<0.93		0.93	0.19	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Bis(2-chloroethyl)ether	<0.93		0.93	0.28	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Bis(2-ethylhexyl) phthalate	<0.93		0.93	0.34	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Butyl benzyl phthalate	<0.93		0.93	0.35	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Carbazole	<0.93		0.93	0.46	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Chrysene	**0.10**	**J**	0.18	0.050	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Dibenz(a,h)anthracene	**0.27**	***3**	0.18	0.036	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Dibenzofuran	<0.93		0.93	0.22	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Diethyl phthalate	<0.93		0.93	0.31	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Dimethyl phthalate	<0.93		0.93	0.24	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Di-n-butyl phthalate	<0.93		0.93	0.28	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Di-n-octyl phthalate	<0.93		0.93	0.30	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Fluoranthene	**0.15**	**J**	0.18	0.034	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Fluorene	<0.18		0.18	0.026	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Hexachlorobenzene	<0.37		0.37	0.043	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Hexachlorobutadiene	<0.93		0.93	0.29	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Hexachlorocyclopentadiene	<3.7		3.7	1.1	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Hexachloroethane	<0.93		0.93	0.28	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5

Client Sample ID: 846V2-174-B03 Dup

Date Collected: 12/02/21 11:10
Date Received: 12/03/21 10:40

Lab Sample ID: 500-209247-4

Matrix: Solid
Percent Solids: 87.0

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	**0.21**	***3**	0.18	0.048	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Isophorone	<0.93		0.93	0.21	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Naphthalene	<0.18		0.18	0.028	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Nitrobenzene	<0.18		0.18	0.046	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
N-Nitrosodi-n-propylamine	<0.37		0.37	0.23	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
N-Nitrosodiphenylamine	<0.93		0.93	0.22	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Pentachlorophenol	<3.7		3.7	3.0	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Phenanthrene	**0.078**	**J**	0.18	0.026	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Phenol	<0.93		0.93	0.41	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5
Pyrene	**0.19**		0.18	0.037	mg/Kg	☼	12/09/21 06:40	12/15/21 15:17	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*78*		*31 - 143*	*12/09/21 06:40*	*12/15/21 15:17*	*5*
2-Fluorobiphenyl	*69*		*43 - 145*	*12/09/21 06:40*	*12/15/21 15:17*	*5*
2-Fluorophenol	*129*		*31 - 166*	*12/09/21 06:40*	*12/15/21 15:17*	*5*
Nitrobenzene-d5 (Surr)	*53*		*37 - 147*	*12/09/21 06:40*	*12/15/21 15:17*	*5*
Phenol-d5	*90*		*30 - 153*	*12/09/21 06:40*	*12/15/21 15:17*	*5*
Terphenyl-d14 (Surr)	*117*		*42 - 157*	*12/09/21 06:40*	*12/15/21 15:17*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.71**	**J**	1.1	0.22	mg/Kg	☼	12/14/21 11:20	12/17/21 02:20	1
Arsenic	**7.6**		0.56	0.19	mg/Kg	☼	12/14/21 11:20	12/17/21 02:20	1
Barium	**37**		0.56	0.064	mg/Kg	☼	12/14/21 11:20	12/17/21 18:58	1
Beryllium	**0.60**		0.22	0.052	mg/Kg	☼	12/14/21 11:20	12/17/21 02:20	1
Boron	**11**		2.8	0.26	mg/Kg	☼	12/14/21 11:20	12/17/21 18:58	1
Cadmium	**0.32**	**B**	0.11	0.020	mg/Kg	☼	12/14/21 11:20	12/17/21 02:20	1
Calcium	**96000**	**B**	56	9.5	mg/Kg	☼	12/14/21 11:20	12/17/21 19:02	5
Chromium	**12**	**B**	0.56	0.28	mg/Kg	☼	12/14/21 11:20	12/17/21 02:20	1
Cobalt	**10**		0.28	0.073	mg/Kg	☼	12/14/21 11:20	12/17/21 18:58	1
Copper	**23**		0.56	0.16	mg/Kg	☼	12/14/21 11:20	12/17/21 02:20	1
Iron	**19000**	**^2**	56	29	mg/Kg	☼	12/14/21 11:20	12/17/21 19:02	5
Lead	**15**		0.28	0.13	mg/Kg	☼	12/14/21 11:20	12/17/21 02:20	1
Magnesium	**53000**		28	14	mg/Kg	☼	12/14/21 11:20	12/17/21 19:02	5
Manganese	**430**		0.56	0.081	mg/Kg	☼	12/14/21 11:20	12/17/21 02:20	1
Nickel	**25**		0.56	0.16	mg/Kg	☼	12/14/21 11:20	12/17/21 02:20	1
Potassium	**2100**		28	9.9	mg/Kg	☼	12/14/21 11:20	12/17/21 02:20	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	12/14/21 11:20	12/17/21 18:58	1
Silver	**0.39**		0.28	0.072	mg/Kg	☼	12/14/21 11:20	12/17/21 02:20	1
Sodium	**440**		56	8.3	mg/Kg	☼	12/14/21 11:20	12/17/21 02:20	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	12/14/21 11:20	12/17/21 18:58	1
Vanadium	**15**		0.28	0.066	mg/Kg	☼	12/14/21 11:20	12/17/21 02:20	1
Zinc	**60**		1.1	0.49	mg/Kg	☼	12/14/21 11:20	12/17/21 02:20	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		12/09/21 07:53	12/21/21 13:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		12/09/21 07:53	12/21/21 13:41	1
Chromium	<0.025		0.025	0.010	mg/L		12/09/21 07:53	12/21/21 13:41	1
Iron	**0.32**	**J**	0.40	0.20	mg/L		12/09/21 07:53	12/21/21 13:41	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209247-1

Client Sample ID: 846V2-174-B03 Dup
Date Collected: 12/02/21 11:10
Date Received: 12/03/21 10:40

Lab Sample ID: 500-209247-4
Matrix: Solid
Percent Solids: 87.0

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		12/09/21 07:53	12/21/21 13:41	1
Manganese	**2.3**		0.025	0.010	mg/L		12/09/21 07:53	12/21/21 13:41	1
Nickel	**0.020**	**J**	0.025	0.010	mg/L		12/09/21 07:53	12/21/21 13:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.062**		0.050	0.010	mg/L		12/16/21 08:44	12/20/21 16:25	1
Barium	**0.39**	**J**	0.50	0.050	mg/L		12/16/21 08:44	12/20/21 16:25	1
Beryllium	**0.0050**		0.0040	0.0040	mg/L		12/16/21 08:44	12/20/21 16:25	1
Boron	**0.32**	**B**	0.20	0.050	mg/L		12/16/21 08:44	12/20/21 16:25	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		12/16/21 08:44	12/20/21 16:25	1
Calcium	**45**		2.5	0.50	mg/L		12/16/21 08:44	12/20/21 16:25	1
Chromium	**0.13**		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 16:25	1
Cobalt	**0.048**		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 16:25	1
Iron	**140**		0.40	0.20	mg/L		12/16/21 08:44	12/20/21 16:25	1
Lead	**0.11**		0.0075	0.0075	mg/L		12/16/21 08:44	12/20/21 16:25	1
Manganese	**0.89**		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 16:25	1
Nickel	**0.16**		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 16:25	1
Potassium	**31**		2.5	0.50	mg/L		12/16/21 08:44	12/20/21 16:25	1
Selenium	<0.050		0.050	0.020	mg/L		12/16/21 08:44	12/20/21 16:25	1
Silver	<0.025		0.025	0.010	mg/L		12/16/21 08:44	12/20/21 16:25	1
Zinc	**0.47**	**J**	0.50	0.020	mg/L		12/16/21 08:44	12/20/21 16:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		12/09/21 07:53	12/20/21 13:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		12/16/21 08:44	12/17/21 13:22	1
Thallium	**0.0031**		0.0020	0.0020	mg/L		12/16/21 08:44	12/17/21 15:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/09/21 12:05	12/10/21 10:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.014**	**J**	0.018	0.0059	mg/Kg	☼	12/09/21 13:40	12/10/21 09:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.26		0.26	0.13	mg/Kg	☼	12/14/21 14:15	12/14/21 16:05	1
pH	**8.5**		0.2	0.2	SU			12/08/21 17:37	1

Definitions/Glossary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209247-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Accreditation/Certification Summary

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209247-1

Laboratory: Eurofins TestAmerica, Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-29-22

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

Client Contact	Laboratory
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Project Name: AE7-052A

Project No.: PTB/WO#: 184-006/040A

500-209247 COC

COC No.: 1 of 1

Lab Job No.: 500-209247

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

Sampler: S. Khodari, S. Ito, M2

Sample Temp: 5.4

Special Instructions:

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

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

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

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

Matrix Key:

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
1	846V2-174-B01	12/1/21	1000	S	X	X					X	X	X	X	X					
2	846V2-174-B02		1030		X	X					X	X	X	X	X					
3	846V2-174-B03		1100		X	X					X	X	X	X	X					
4	846V2-174-B03DUP		1110		X	X					X	X	X	X	X					
5	Trip Blank #1				X															

Relinquished by:		Date/Time 12/3/21	Received by:	Date/Time 12/3/21 0943
Relinquished by:		Date/Time 12/3/21 1040	Received by:	Date/Time 12/3/21 1040
Relinquished by:		Date/Time	Received by:	Date/Time

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ANALYTICAL REPORT

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

Laboratory Job ID: 500-209899-1
Client Project/Site: IDOT - AE7-052
Revision: 1

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

Attn: Ms. Colleen Grey

Authorized for release by:
1/10/2022 11:31:11 AM

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

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209899-1

Client Sample ID: 846V2-174-B04
Date Collected: 12/16/21 11:00
Date Received: 12/16/21 12:08

Lab Sample ID: 500-209899-1
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00057	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Acetone	<0.017		0.017	0.0075	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Trichloroethene	**0.0017**		0.0017	0.00058	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	☼	12/16/21 17:39	12/29/21 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 134*	*12/16/21 17:39*	*12/29/21 16:04*	*1*
4-Bromofluorobenzene (Surr)	*109*		*75 - 131*	*12/16/21 17:39*	*12/29/21 16:04*	*1*
Dibromofluoromethane	*119*		*75 - 126*	*12/16/21 17:39*	*12/29/21 16:04*	*1*
Toluene-d8 (Surr)	*108*		*75 - 124*	*12/16/21 17:39*	*12/29/21 16:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209899-1

Client Sample ID: 846V2-174-B04
Date Collected: 12/16/21 11:00
Date Received: 12/16/21 12:08

Lab Sample ID: 500-209899-1
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
2,4,6-Trichlorophenol	<0.38	*-	0.38	0.13	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
4-Nitrophenol	<0.76	*-	0.76	0.36	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Benzo[a]pyrene	<0.038		0.038	0.0073	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Benzo[b]fluoranthene	**0.031**	**J**	0.038	0.0082	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Fluoranthene	**0.0081**	**J**	0.038	0.0070	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209899-1

Client Sample ID: 846V2-174-B04
Date Collected: 12/16/21 11:00
Date Received: 12/16/21 12:08

Lab Sample ID: 500-209899-1
Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0098	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
N-Nitrosodi-n-propylamine	<0.076	*-	0.076	0.046	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Phenanthrene	**0.0058**	**J**	0.038	0.0053	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1
Pyrene	**0.0095**	**J**	0.038	0.0075	mg/Kg	☼	12/20/21 07:07	12/21/21 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*63*		*31 - 143*	*12/20/21 07:07*	*12/21/21 16:11*	*1*
2-Fluorobiphenyl	*57*		*43 - 145*	*12/20/21 07:07*	*12/21/21 16:11*	*1*
2-Fluorophenol	*81*		*31 - 166*	*12/20/21 07:07*	*12/21/21 16:11*	*1*
Nitrobenzene-d5 (Surr)	*51*		*37 - 147*	*12/20/21 07:07*	*12/21/21 16:11*	*1*
Phenol-d5	*57*		*30 - 153*	*12/20/21 07:07*	*12/21/21 16:11*	*1*
Terphenyl-d14 (Surr)	*79*		*42 - 157*	*12/20/21 07:07*	*12/21/21 16:11*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.65**	**J**	1.2	0.23	mg/Kg	☼	12/20/21 10:15	12/23/21 02:22	1
Arsenic	**7.8**		0.59	0.20	mg/Kg	☼	12/20/21 10:15	12/23/21 02:22	1
Barium	**50**		0.59	0.068	mg/Kg	☼	12/20/21 10:15	12/23/21 21:50	1
Beryllium	**0.58**		0.24	0.055	mg/Kg	☼	12/20/21 10:15	12/28/21 20:52	1
Boron	**3.7**		3.0	0.28	mg/Kg	☼	12/20/21 10:15	12/23/21 02:22	1
Cadmium	**0.046**	**J B**	0.12	0.021	mg/Kg	☼	12/20/21 10:15	12/23/21 02:22	1
Calcium	**35000**		12	2.0	mg/Kg	☼	12/20/21 10:15	12/23/21 21:50	1
Chromium	**14**	**B**	0.59	0.29	mg/Kg	☼	12/20/21 10:15	12/23/21 02:22	1
Cobalt	**13**		0.30	0.078	mg/Kg	☼	12/20/21 10:15	12/23/21 02:22	1
Copper	**22**		0.59	0.17	mg/Kg	☼	12/20/21 10:15	12/23/21 02:22	1
Iron	**20000**	**B**	12	6.2	mg/Kg	☼	12/20/21 10:15	12/29/21 17:10	1
Lead	**18**		0.30	0.14	mg/Kg	☼	12/20/21 10:15	12/23/21 21:50	1
Magnesium	**20000**		5.9	2.9	mg/Kg	☼	12/20/21 10:15	12/23/21 21:50	1
Manganese	**360**	**B**	0.59	0.086	mg/Kg	☼	12/20/21 10:15	12/23/21 21:50	1
Nickel	**32**		0.59	0.17	mg/Kg	☼	12/20/21 10:15	12/23/21 02:22	1
Potassium	**1500**		30	10	mg/Kg	☼	12/20/21 10:15	12/28/21 20:52	1
Selenium	<0.59		0.59	0.35	mg/Kg	☼	12/20/21 10:15	12/23/21 02:22	1
Silver	<1.5		1.5	0.38	mg/Kg	☼	12/20/21 10:15	12/23/21 21:53	5
Sodium	**370**		59	8.8	mg/Kg	☼	12/20/21 10:15	12/23/21 21:50	1
Thallium	<0.59		0.59	0.30	mg/Kg	☼	12/20/21 10:15	12/23/21 02:22	1
Vanadium	**15**		0.30	0.070	mg/Kg	☼	12/20/21 10:15	12/23/21 02:22	1
Zinc	**63**		1.2	0.52	mg/Kg	☼	12/20/21 10:15	12/23/21 02:22	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.43**		0.40	0.20	mg/L		01/03/22 08:23	01/05/22 14:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/03/22 08:23	01/03/22 23:23	1
Manganese	**3.4**		0.025	0.010	mg/L		01/03/22 08:23	01/05/22 13:14	1
Nickel	**0.017**	**J**	0.025	0.010	mg/L		01/03/22 08:23	01/03/22 23:23	1

Client Sample Results

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209899-1

Client Sample ID: 846V2-174-B04

Date Collected: 12/16/21 11:00
Date Received: 12/16/21 12:08

Lab Sample ID: 500-209899-1

Matrix: Solid
Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.040**	**J**	0.050	0.010	mg/L		01/03/22 08:25	01/04/22 15:41	1
Barium	**0.33**	**J**	0.50	0.050	mg/L		01/03/22 08:25	01/04/22 15:41	1
Beryllium	**0.0040**		0.0040	0.0040	mg/L		01/03/22 08:25	01/04/22 15:41	1
Boron	**0.19**	**B**	0.10	0.050	mg/L		01/03/22 08:25	01/04/22 15:41	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/03/22 08:25	01/04/22 15:41	1
Calcium	**23**		2.5	0.50	mg/L		01/03/22 08:25	01/04/22 15:41	1
Chromium	**0.095**		0.025	0.010	mg/L		01/03/22 08:25	01/04/22 15:41	1
Cobalt	**0.038**		0.025	0.010	mg/L		01/03/22 08:25	01/04/22 15:41	1
Iron	**94**	**^2**	0.40	0.20	mg/L		01/03/22 08:25	01/04/22 15:41	1
Lead	**0.053**		0.0075	0.0075	mg/L		01/03/22 08:25	01/04/22 15:41	1
Manganese	**0.55**		0.025	0.010	mg/L		01/03/22 08:25	01/04/22 15:41	1
Nickel	**0.11**		0.025	0.010	mg/L		01/03/22 08:25	01/04/22 15:41	1
Potassium	**24**		2.5	0.50	mg/L		01/03/22 08:25	01/04/22 15:41	1
Selenium	<0.050		0.050	0.020	mg/L		01/03/22 08:25	01/04/22 15:41	1
Silver	<0.025		0.025	0.010	mg/L		01/03/22 08:25	01/04/22 15:41	1
Zinc	**0.25**	**J**	0.50	0.020	mg/L		01/03/22 08:25	01/04/22 15:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		01/03/22 08:25	01/03/22 18:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/03/22 08:25	01/03/22 18:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/28/21 11:25	12/29/21 09:24	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.028**		0.018	0.0062	mg/Kg	☼	12/27/21 14:35	12/28/21 08:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.27	^+	0.27	0.14	mg/Kg	☼	12/21/21 17:43	12/22/21 13:25	1
pH	**8.1**		0.2	0.2	SU			12/23/21 19:42	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209899-1

Client Sample ID: 846V2-174-B05
Date Collected: 12/16/21 11:30
Date Received: 12/16/21 12:08

Lab Sample ID: 500-209899-2
Matrix: Solid
Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.00099**	**J**	0.0018	0.00061	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Acetone	<0.018		0.018	0.0079	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Chloroethane	<0.0045	*-	0.0045	0.0013	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Trichloroethene	**0.0019**		0.0018	0.00061	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	☼	12/16/21 17:39	12/23/21 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*125*		*70 - 134*	*12/16/21 17:39*	*12/23/21 16:37*	*1*
4-Bromofluorobenzene (Surr)	*110*		*75 - 131*	*12/16/21 17:39*	*12/23/21 16:37*	*1*
Dibromofluoromethane	*123*		*75 - 126*	*12/16/21 17:39*	*12/23/21 16:37*	*1*
Toluene-d8 (Surr)	*110*		*75 - 124*	*12/16/21 17:39*	*12/23/21 16:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1

Client Sample ID: 846V2-174-B05

Date Collected: 12/16/21 11:30
Date Received: 12/16/21 12:08

Lab Sample ID: 500-209899-2

Matrix: Solid
Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
2,4,6-Trichlorophenol	<0.36	*-	0.36	0.12	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
4-Nitrophenol	<0.73	*-	0.73	0.35	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Benzo[a]pyrene	**0.043**	***3**	0.036	0.0070	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Benzo[b]fluoranthene	**0.042**	***3**	0.036	0.0078	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Benzo[g,h,i]perylene	**0.037**	***3**	0.036	0.012	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Benzo[k]fluoranthene	<0.036	*3	0.036	0.011	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Chrysene	**0.020**	**J**	0.036	0.0099	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Dibenz(a,h)anthracene	<0.036	*3	0.036	0.0070	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Fluoranthene	**0.017**	**J**	0.036	0.0067	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209899-1

Client Sample ID: 846V2-174-B05
Date Collected: 12/16/21 11:30
Date Received: 12/16/21 12:08

Lab Sample ID: 500-209899-2
Matrix: Solid
Percent Solids: 86.9

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	<0.036	*3	0.036	0.0094	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
N-Nitrosodi-n-propylamine	<0.073	*-	0.073	0.044	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Phenanthrene	**0.0099**	**J**	0.036	0.0051	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1
Pyrene	**0.050**		0.036	0.0072	mg/Kg	☼	12/20/21 07:07	12/22/21 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*61*		*31 - 143*	*12/20/21 07:07*	*12/22/21 18:16*	*1*
2-Fluorobiphenyl	*94*		*43 - 145*	*12/20/21 07:07*	*12/22/21 18:16*	*1*
2-Fluorophenol	*91*		*31 - 166*	*12/20/21 07:07*	*12/22/21 18:16*	*1*
Nitrobenzene-d5 (Surr)	*76*		*37 - 147*	*12/20/21 07:07*	*12/22/21 18:16*	*1*
Phenol-d5	*55*		*30 - 153*	*12/20/21 07:07*	*12/22/21 18:16*	*1*
Terphenyl-d14 (Surr)	*176*	*S1+*	*42 - 157*	*12/20/21 07:07*	*12/22/21 18:16*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.69**	**J**	1.1	0.21	mg/Kg	☼	12/20/21 10:15	12/23/21 02:25	1
Arsenic	**6.3**		0.54	0.19	mg/Kg	☼	12/20/21 10:15	12/23/21 02:25	1
Barium	**38**		0.54	0.062	mg/Kg	☼	12/20/21 10:15	12/23/21 21:57	1
Beryllium	**0.57**		0.22	0.051	mg/Kg	☼	12/20/21 10:15	12/28/21 20:55	1
Boron	**8.5**		2.7	0.25	mg/Kg	☼	12/20/21 10:15	12/23/21 02:25	1
Cadmium	**0.047**	**J B**	0.11	0.020	mg/Kg	☼	12/20/21 10:15	12/23/21 02:25	1
Calcium	**89000**		54	9.2	mg/Kg	☼	12/20/21 10:15	12/23/21 22:00	5
Chromium	**13**	**B**	0.54	0.27	mg/Kg	☼	12/20/21 10:15	12/23/21 02:25	1
Cobalt	**10**		0.27	0.071	mg/Kg	☼	12/20/21 10:15	12/23/21 02:25	1
Copper	**16**		0.54	0.15	mg/Kg	☼	12/20/21 10:15	12/23/21 02:25	1
Iron	**23000**	**B**	54	28	mg/Kg	☼	12/20/21 10:15	12/29/21 17:13	5
Lead	**16**		1.4	0.63	mg/Kg	☼	12/20/21 10:15	12/23/21 22:00	5
Magnesium	**51000**		27	13	mg/Kg	☼	12/20/21 10:15	12/23/21 22:00	5
Manganese	**340**	**B**	0.54	0.079	mg/Kg	☼	12/20/21 10:15	12/23/21 21:57	1
Nickel	**24**		0.54	0.16	mg/Kg	☼	12/20/21 10:15	12/23/21 02:25	1
Potassium	**2100**		27	9.6	mg/Kg	☼	12/20/21 10:15	12/28/21 20:55	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	12/20/21 10:15	12/23/21 02:25	1
Silver	<1.4		1.4	0.35	mg/Kg	☼	12/20/21 10:15	12/23/21 22:00	5
Sodium	**380**		54	8.0	mg/Kg	☼	12/20/21 10:15	12/23/21 21:57	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	12/20/21 10:15	12/23/21 02:25	1
Vanadium	**17**		0.27	0.064	mg/Kg	☼	12/20/21 10:15	12/23/21 02:25	1
Zinc	**52**		1.1	0.48	mg/Kg	☼	12/20/21 10:15	12/23/21 02:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		01/03/22 08:25	01/04/22 15:45	1
Barium	<0.50		0.50	0.050	mg/L		01/03/22 08:25	01/04/22 15:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/03/22 08:25	01/04/22 15:45	1
Boron	**0.090**	**J B**	0.10	0.050	mg/L		01/03/22 08:25	01/04/22 15:45	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209899-1

Client Sample ID: 846V2-174-B05
Date Collected: 12/16/21 11:30
Date Received: 12/16/21 12:08

Lab Sample ID: 500-209899-2
Matrix: Solid
Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/03/22 08:25	01/04/22 15:45	1
Calcium	**17**		2.5	0.50	mg/L		01/03/22 08:25	01/04/22 15:45	1
Chromium	<0.025		0.025	0.010	mg/L		01/03/22 08:25	01/04/22 15:45	1
Cobalt	<0.025		0.025	0.010	mg/L		01/03/22 08:25	01/04/22 15:45	1
Iron	**3.6**	**^2**	0.40	0.20	mg/L		01/03/22 08:25	01/04/22 15:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/03/22 08:25	01/04/22 15:45	1
Manganese	**0.024**	**J**	0.025	0.010	mg/L		01/03/22 08:25	01/04/22 15:45	1
Nickel	<0.025		0.025	0.010	mg/L		01/03/22 08:25	01/04/22 15:45	1
Potassium	**2.2**	**J**	2.5	0.50	mg/L		01/03/22 08:25	01/04/22 15:45	1
Selenium	<0.050		0.050	0.020	mg/L		01/03/22 08:25	01/04/22 15:45	1
Silver	<0.025		0.025	0.010	mg/L		01/03/22 08:25	01/04/22 15:45	1
Zinc	<0.50		0.50	0.020	mg/L		01/03/22 08:25	01/04/22 15:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		01/03/22 08:25	01/03/22 18:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/03/22 08:25	01/03/22 18:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		12/28/21 11:25	12/29/21 09:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.025**		0.017	0.0058	mg/Kg	☼	12/27/21 14:35	12/28/21 08:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.24	F2	0.24	0.12	mg/Kg	☼	12/28/21 18:05	12/28/21 20:22	1
pH	**7.3**		0.2	0.2	SU			12/23/21 19:47	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - AE7-052

Job ID: 500-209899-1

Client Sample ID: Trip Blank #2

Date Collected: 12/16/21 00:00
Date Received: 12/16/21 12:08

Lab Sample ID: 500-209899-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Acetone	<0.020		0.020	0.0087	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Chloromethane	<0.0050	*-	0.0050	0.0020	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg		12/16/21 00:00	12/30/21 10:40	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg		12/16/21 00:00	12/30/21 10:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*123*		*70 - 134*	*12/16/21 00:00*	*12/30/21 10:40*	*1*
4-Bromofluorobenzene (Surr)	*109*		*75 - 131*	*12/16/21 00:00*	*12/30/21 10:40*	*1*
Dibromofluoromethane	*120*		*75 - 126*	*12/16/21 00:00*	*12/30/21 10:40*	*1*
Toluene-d8 (Surr)	*106*		*75 - 124*	*12/16/21 00:00*	*12/30/21 10:40*	*1*

Definitions/Glossary

Client: Andrews Engineering Inc. Job ID: 500-209899-1
Project/Site: IDOT - AE7-052

Qualifiers

GC/MS VOA

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

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
F2	MS/MSD RPD exceeds control limits

Glossary

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

Glossary (Continued)

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

Accreditation/Certification Summary

Client: Andrews Engineering Inc. Job ID: 500-209899-1
Project/Site: IDOT - AE7-052

Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-29-22

ANDREWS ENGINEERING

CHAIN OF CUSTODY RECORD

500-209899 COC

500-209894

Client Contact	Lab	Project Name	COC No
Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng com	Test America - Chicago Address 2417 Bond Street University Park, IL 60484 Phone 708-534-5200 Contact Dick Wright email richard wright@testamericainc com	AE7-052A Project No PTB/WO #1: 184-006/052A TAT ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other Sampler: S. Khudaverdyan & S. Heinz	1 of 1 Lab Job No Sample Temp 3.8

Special Instructions:

See Table 2 for complete parameter lists and minimum reporting limits

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

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

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

Matrix Key:

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
1	864V2-174-B04	12/16/21	1100	S	X	X					X	X	X	X	X					
2	864V2-174-B05	12/16/21	1130	S	X	X					X	X	X	X	X					
3	Trip Blank #2				X															

Relinquished by	Date/Time 12/16/21 1208	Received by	Date/Time 12/17/21 1208
Relinquished by	Date/Time	Received by	Date/Time
Relinquished by	Date/Time	Received by	Date/Time