



# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

100 block of East Irving Park Road (southwest corner of Irving Park Road and Park Street)

City: Roselle State: IL Zip Code: 60172

County: DuPage Township: Bloomington

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

Latitude: 41.9836 Longitude: -88.07616  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

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

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

Estimated Volume of debris (cu. Yd.): 1

### II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATION 62R60-B03 WAS SAMPLED ADJACENT TO SITE 4386-14. SEE TABLE 3b AND FIGURE 3 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORT - EUROFINS JOB ID NUMBER: 500-223677-1

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

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

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

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

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



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

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

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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***

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

ISGS Site 4386-14  
 Veteran's Memorial Park

Sample ID	62R60-B03	Maximum Allowable Concentration				
Sample Depth (ft)	0-5					
Sample Date	10/11/2022	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area
PID	0					
Sample pH	8.6					
Matrix	Soil					
<b>No Contaminants of Concern Noted.</b>						

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223677-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/27/2022 5:53:18 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B03**

**Lab Sample ID: 500-223677-1**

**Date Collected: 10/11/22 09:35**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 77.0**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
1,1,1,2-Tetrachloroethane	<0.0019	*3	0.0019	0.00060	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Acetone	<0.019		0.019	0.0082	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Carbon tetrachloride	<0.0019	*+	0.0019	0.00055	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
<b>Toluene</b>	<b>0.00048</b>	<b>J</b>	0.0019	0.00048	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	☼	10/12/22 18:06	10/18/22 10:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 134	10/12/22 18:06	10/18/22 10:36	1
4-Bromofluorobenzene (Surr)	100	*3	75 - 131	10/12/22 18:06	10/18/22 10:36	1
Dibromofluoromethane	107		75 - 126	10/12/22 18:06	10/18/22 10:36	1
Toluene-d8 (Surr)	113		75 - 124	10/12/22 18:06	10/18/22 10:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
1,2-Dichlorobenzene	<0.21		0.21	0.051	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
1,3-Dichlorobenzene	<0.21		0.21	0.048	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
1,4-Dichlorobenzene	<0.21		0.21	0.055	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B03**

**Lab Sample ID: 500-223677-1**

**Date Collected: 10/11/22 09:35**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 77.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.097	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
2,4,6-Trichlorophenol	<0.42		0.42	0.15	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
2,4-Dinitrophenol	<0.86	F1	0.86	0.75	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
2,4-Dinitrotoluene	<0.21		0.21	0.068	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
2,6-Dinitrotoluene	<0.21		0.21	0.084	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
2-Chloronaphthalene	<0.21		0.21	0.047	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
2-Chlorophenol	<0.21		0.21	0.073	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
2-Methylnaphthalene	<0.086		0.086	0.0078	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
2-Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
2-Nitroaniline	<0.21		0.21	0.057	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
2-Nitrophenol	<0.42		0.42	0.10	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
3 & 4 Methylphenol	<0.21		0.21	0.071	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
3,3'-Dichlorobenzidine	<0.21	F1	0.21	0.060	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
4,6-Dinitro-2-methylphenol	<0.86	F2	0.86	0.34	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.056	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
4-Chloroaniline	<0.86		0.86	0.20	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.050	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
4-Nitroaniline	<0.42	F1	0.42	0.18	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
4-Nitrophenol	<0.86		0.86	0.41	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Acenaphthene	<0.042		0.042	0.0077	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Acenaphthylene	<0.042		0.042	0.0056	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Anthracene	<0.042		0.042	0.0071	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Benzo[a]anthracene	<0.042		0.042	0.0057	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Benzo[a]pyrene	<0.042		0.042	0.0082	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Benzo[b]fluoranthene	<0.042	F1	0.042	0.0092	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Benzo[g,h,i]perylene	<0.042	F1	0.042	0.014	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Benzo[k]fluoranthene	<0.042	F1	0.042	0.013	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.064	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.078	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Butyl benzyl phthalate	<0.21		0.21	0.081	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Chrysene	<0.042		0.042	0.012	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Dibenz(a,h)anthracene	<0.042	F1	0.042	0.0082	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Dibenzofuran	<0.21		0.21	0.050	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Diethyl phthalate	<0.21		0.21	0.072	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Dimethyl phthalate	<0.21		0.21	0.056	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Di-n-butyl phthalate	<0.21		0.21	0.065	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Di-n-octyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Fluoranthene	<0.042		0.042	0.0079	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Fluorene	<0.042		0.042	0.0060	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Hexachlorobenzene	<0.086		0.086	0.0099	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Hexachlorobutadiene	<0.21		0.21	0.067	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Hexachlorocyclopentadiene	<0.86	F1	0.86	0.25	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Hexachloroethane	<0.21	F1	0.21	0.065	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B03**

**Lab Sample ID: 500-223677-1**

Date Collected: 10/11/22 09:35

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 77.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.042	F1	0.042	0.011	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Isophorone	<0.21		0.21	0.048	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Naphthalene	<0.042		0.042	0.0066	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Nitrobenzene	<0.042		0.042	0.011	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
N-Nitrosodi-n-propylamine	<0.086		0.086	0.052	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Pentachlorophenol	<0.86	F1	0.86	0.68	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
<b>Phenanthrene</b>	<b>0.0077</b>	<b>J</b>	0.042	0.0059	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Phenol	<0.21		0.21	0.095	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
<b>Pyrene</b>	<b>0.017</b>	<b>J</b>	0.042	0.0085	mg/Kg	☼	10/20/22 07:24	10/25/22 16:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	91		31 - 143				10/20/22 07:24	10/25/22 16:10	1
2-Fluorobiphenyl	93		43 - 145				10/20/22 07:24	10/25/22 16:10	1
2-Fluorophenol	102		31 - 166				10/20/22 07:24	10/25/22 16:10	1
Nitrobenzene-d5 (Surr)	73		37 - 147				10/20/22 07:24	10/25/22 16:10	1
Phenol-d5	87		30 - 153				10/20/22 07:24	10/25/22 16:10	1
Terphenyl-d14 (Surr)	105		42 - 157				10/20/22 07:24	10/25/22 16:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.75</b>	<b>J</b>	1.3	0.25	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Arsenic</b>	<b>8.8</b>		0.64	0.22	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Barium</b>	<b>56</b>		0.64	0.073	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Beryllium</b>	<b>0.81</b>		0.26	0.060	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Boron</b>	<b>7.5</b>		3.2	0.30	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Cadmium</b>	<b>0.32</b>		0.13	0.023	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Calcium</b>	<b>23000</b>		13	2.2	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Chromium</b>	<b>16</b>		0.64	0.32	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Cobalt</b>	<b>12</b>		0.32	0.084	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Copper</b>	<b>32</b>		0.64	0.18	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Iron</b>	<b>20000</b>		13	6.6	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Lead</b>	<b>20</b>		0.32	0.15	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Magnesium</b>	<b>16000</b>	<b>B</b>	6.4	3.2	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Manganese</b>	<b>220</b>		0.64	0.093	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Nickel</b>	<b>37</b>		0.64	0.19	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Potassium</b>	<b>1800</b>		32	11	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Selenium</b>	<b>0.53</b>	<b>J</b>	0.64	0.38	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Silver</b>	<b>0.38</b>		0.32	0.082	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Sodium</b>	<b>270</b>		64	9.4	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Thallium</b>	<b>0.62</b>	<b>J</b>	0.64	0.32	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Vanadium</b>	<b>20</b>		0.32	0.075	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1
<b>Zinc</b>	<b>100</b>		1.3	0.56	mg/Kg	☼	10/18/22 16:31	10/20/22 14:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/19/22 16:36	10/25/22 21:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:36	10/26/22 11:17	1
Chromium	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/25/22 21:53	1
<b>Iron</b>	<b>0.37</b>	<b>J ^2</b>	0.40	0.20	mg/L		10/19/22 16:36	10/25/22 21:53	1

Euofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B03**

**Lab Sample ID: 500-223677-1**

Date Collected: 10/11/22 09:35

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 77.0

**Method: SW846 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		10/19/22 16:36	10/25/22 21:53	1
<b>Manganese</b>	<b>0.63</b>		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 11:17	1
Nickel	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/25/22 21:53	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.081</b>		0.050	0.010	mg/L		10/19/22 16:41	10/24/22 19:08	1
<b>Barium</b>	<b>0.42</b>	J	0.50	0.050	mg/L		10/19/22 16:41	10/24/22 19:08	1
<b>Beryllium</b>	<b>0.0082</b>		0.0040	0.0040	mg/L		10/19/22 16:41	10/24/22 19:08	1
<b>Boron</b>	<b>0.22</b>		0.10	0.050	mg/L		10/19/22 16:41	10/24/22 19:08	1
<b>Cadmium</b>	<b>0.0021</b>	J	0.0050	0.0020	mg/L		10/19/22 16:41	10/24/22 19:08	1
<b>Calcium</b>	<b>23</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 19:08	1
<b>Chromium</b>	<b>0.16</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:08	1
<b>Cobalt</b>	<b>0.089</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:08	1
<b>Iron</b>	<b>190</b>	^2	0.40	0.20	mg/L		10/19/22 16:41	10/24/22 19:08	1
<b>Lead</b>	<b>0.13</b>		0.0075	0.0075	mg/L		10/19/22 16:41	10/24/22 19:08	1
<b>Manganese</b>	<b>0.63</b>	^2	0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:08	1
<b>Nickel</b>	<b>0.26</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:08	1
<b>Potassium</b>	<b>41</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 19:08	1
Selenium	<0.050		0.050	0.020	mg/L		10/19/22 16:41	10/24/22 19:08	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:08	1
<b>Zinc</b>	<b>0.88</b>		0.50	0.020	mg/L		10/19/22 16:41	10/24/22 19:08	1

**Method: SW846 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		10/19/22 16:36	10/26/22 02:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	F1	0.0060	0.0060	mg/L		10/19/22 16:41	10/21/22 15:40	1
<b>Thallium</b>	<b>0.019</b>		0.0020	0.0020	mg/L		10/19/22 16:41	10/21/22 15:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/19/22 14:10	10/20/22 12:11	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.056</b>		0.020	0.0067	mg/Kg	⊛	10/19/22 13:55	10/20/22 09:23	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.19</b>	J	0.27	0.13	mg/Kg	⊛	10/14/22 11:55	10/16/22 13:50	1
<b>pH (SW846 9045D)</b>	<b>8.6</b>		0.2	0.2	SU			10/18/22 15:24	1



# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Laboratory: Eurofins Chicago

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

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

## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-02-22
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23







# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

201-211 East Irving Park Road (southeast corner of Irving Park Road and Park Street)

City: Roselle State: IL Zip Code: 60172

County: DuPage Township: Bloomington

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

Latitude: 41.98362 Longitude: -88.07593  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

IEPA Site Number(s), if assigned: BOL: 0434825118 BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

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

Estimated Volume of debris (cu. Yd.): 1

### II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATION 62R60-B04 WAS SAMPLED ADJACENT TO SITE 4386-15. SEE TABLE 3c AND FIGURE 3 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORT - EUROFINS JOB ID NUMBER: 500-223677-1.

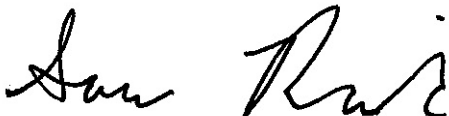
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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

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

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

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



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

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

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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***

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



**ISGS Site 4386-15**  
**Commercial Building**

<b>Sample ID</b>	62R60-B04	<b>Maximum Allowable Concentration</b>				
<b>Sample Depth (ft)</b>	0-5					
<b>Sample Date</b>	10/11/2022					
<b>PID</b>	0	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area
<b>Sample pH</b>	7.5					
<b>Matrix</b>	Soil					
<b>No Contaminants of Concern Noted.</b>						

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223677-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/27/2022 5:53:18 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B04**

**Lab Sample ID: 500-223677-2**

Date Collected: 10/11/22 09:45

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 79.4

**Method: SW846 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	☼	10/12/22 18:06	10/18/22 10:59	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
1,2-Dichloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
2-Hexanone	<0.0050		0.0050	0.0015	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Acetone	<0.020		0.020	0.0086	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Carbon tetrachloride	<0.0020	*+	0.0020	0.00058	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
<b>Toluene</b>	<b>0.00063</b>	<b>J</b>	0.0020	0.00050	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	10/12/22 18:06	10/18/22 10:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 134	10/12/22 18:06	10/18/22 10:59	1
4-Bromofluorobenzene (Surr)	86		75 - 131	10/12/22 18:06	10/18/22 10:59	1
Dibromofluoromethane	109		75 - 126	10/12/22 18:06	10/18/22 10:59	1
Toluene-d8 (Surr)	105		75 - 124	10/12/22 18:06	10/18/22 10:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B04**

**Lab Sample ID: 500-223677-2**

**Date Collected: 10/11/22 09:45**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 79.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
2-Methylnaphthalene	<0.083		0.083	0.0075	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
<b>Benzo[a]anthracene</b>	<b>0.030</b>	<b>J</b>	0.041	0.0055	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
<b>Benzo[a]pyrene</b>	<b>0.045</b>		0.041	0.0079	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
<b>Benzo[b]fluoranthene</b>	<b>0.084</b>		0.041	0.0088	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
<b>Benzo[g,h,i]perylene</b>	<b>0.024</b>	<b>J</b>	0.041	0.013	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
<b>Benzo[k]fluoranthene</b>	<b>0.028</b>	<b>J</b>	0.041	0.012	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
<b>Chrysene</b>	<b>0.059</b>		0.041	0.011	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
<b>Dibenz(a,h)anthracene</b>	<b>0.029</b>	<b>J</b>	0.041	0.0079	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
<b>Fluoranthene</b>	<b>0.13</b>		0.041	0.0076	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Hexachlorobenzene	<0.083		0.083	0.0095	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B04**

**Lab Sample ID: 500-223677-2**

Date Collected: 10/11/22 09:45

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 79.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.023</b>	<b>J</b>	0.041	0.011	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
<b>Phenanthrene</b>	<b>0.029</b>	<b>J</b>	0.041	0.0057	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
<b>Pyrene</b>	<b>0.071</b>		0.041	0.0081	mg/Kg	☼	10/20/22 07:24	10/25/22 18:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	40		31 - 143				10/20/22 07:24	10/25/22 18:08	1
2-Fluorobiphenyl	81		43 - 145				10/20/22 07:24	10/25/22 18:08	1
2-Fluorophenol	101		31 - 166				10/20/22 07:24	10/25/22 18:08	1
Nitrobenzene-d5 (Surr)	72		37 - 147				10/20/22 07:24	10/25/22 18:08	1
Phenol-d5	77		30 - 153				10/20/22 07:24	10/25/22 18:08	1
Terphenyl-d14 (Surr)	78		42 - 157				10/20/22 07:24	10/25/22 18:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.74</b>	<b>J</b>	1.2	0.23	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Arsenic</b>	<b>10</b>		0.60	0.21	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Barium</b>	<b>87</b>		0.60	0.068	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Beryllium</b>	<b>0.93</b>		0.24	0.056	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Boron</b>	<b>4.0</b>		3.0	0.28	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Cadmium</b>	<b>0.20</b>		0.12	0.022	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Calcium</b>	<b>4100</b>		12	2.0	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Chromium</b>	<b>16</b>		0.60	0.30	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Cobalt</b>	<b>14</b>		0.30	0.079	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Copper</b>	<b>25</b>		0.60	0.17	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Iron</b>	<b>22000</b>		12	6.2	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Lead</b>	<b>21</b>		0.30	0.14	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Magnesium</b>	<b>2900</b>	<b>B</b>	6.0	3.0	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Manganese</b>	<b>360</b>		0.60	0.087	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Nickel</b>	<b>29</b>		0.60	0.17	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Potassium</b>	<b>1400</b>		30	11	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Selenium</b>	<b>0.46</b>	<b>J</b>	0.60	0.35	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Silver</b>	<b>0.35</b>		0.30	0.077	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Sodium</b>	<b>260</b>		60	8.9	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Thallium</b>	<b>0.35</b>	<b>J</b>	0.60	0.30	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Vanadium</b>	<b>25</b>		0.30	0.071	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1
<b>Zinc</b>	<b>71</b>		1.2	0.53	mg/Kg	☼	10/18/22 16:31	10/20/22 14:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/19/22 16:36	10/25/22 22:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:36	10/26/22 11:37	1
Chromium	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/25/22 22:07	1
<b>Iron</b>	<b>0.42</b>		0.40	0.20	mg/L		10/19/22 16:36	10/26/22 16:36	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B04**

**Lab Sample ID: 500-223677-2**

Date Collected: 10/11/22 09:45

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 79.4

**Method: SW846 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		10/19/22 16:36	10/25/22 22:07	1
<b>Manganese</b>	<b>0.037</b>		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 11:37	1
Nickel	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/25/22 22:07	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.058</b>		0.050	0.010	mg/L		10/19/22 16:41	10/24/22 19:27	1
<b>Barium</b>	<b>0.65</b>		0.50	0.050	mg/L		10/19/22 16:41	10/24/22 19:27	1
<b>Beryllium</b>	<b>0.0073</b>		0.0040	0.0040	mg/L		10/19/22 16:41	10/24/22 19:27	1
<b>Boron</b>	<b>0.13</b>		0.10	0.050	mg/L		10/19/22 16:41	10/24/22 19:27	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/19/22 16:41	10/24/22 19:27	1
<b>Calcium</b>	<b>24</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 19:27	1
<b>Chromium</b>	<b>0.15</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:27	1
<b>Cobalt</b>	<b>0.041</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:27	1
<b>Iron</b>	<b>180</b> ^2		0.40	0.20	mg/L		10/19/22 16:41	10/24/22 19:27	1
<b>Lead</b>	<b>0.082</b>		0.0075	0.0075	mg/L		10/19/22 16:41	10/24/22 19:27	1
<b>Manganese</b>	<b>0.66</b> ^2		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:27	1
<b>Nickel</b>	<b>0.18</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:27	1
<b>Potassium</b>	<b>21</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 19:27	1
Selenium	<0.050		0.050	0.020	mg/L		10/19/22 16:41	10/24/22 19:27	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:27	1
<b>Zinc</b>	<b>0.51</b>		0.50	0.020	mg/L		10/19/22 16:41	10/24/22 19:27	1

**Method: SW846 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		10/19/22 16:36	10/26/22 02:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/19/22 16:41	10/21/22 16:01	1
<b>Thallium</b>	<b>0.0052</b>		0.0020	0.0020	mg/L		10/19/22 16:41	10/21/22 16:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/19/22 14:10	10/20/22 12:21	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.059</b>		0.019	0.0065	mg/Kg	✱	10/19/22 13:55	10/20/22 09:24	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.53</b>		0.28	0.14	mg/Kg	✱	10/14/22 11:55	10/16/22 13:51	1
<b>pH (SW846 9045D)</b>	<b>7.5</b>		0.2	0.2	SU			10/18/22 15:24	1



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### 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.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

Eurofins Chicago

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Laboratory: Eurofins Chicago

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


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

## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-02-22
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23

# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	 500-223677 COC	<b>Laboratory</b> Lab Test America - Chicago Address 2417 Bond Street University Park, IL 60484 Phone 708-534-5200 Contact Dick Wright email richard.wright@testamericainc.com	Project Name <u>AE8-003A</u> Project No <u>PTB/WO #: 195-002/1003A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>K. Hoove / S. Khodaei</u>	COC No <u>1</u> of <u>2</u> Lab Job No <u>500-223677</u> Sample Temp <u>2.4 → 2.6</u> <u>0.8 → 3.0</u>
--	---	--	---	---

**Special Instructions:**  
 See Table 2 for complete parameter lists and minimum reporting limits  
 \* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal  
 \*\* If SPLP result exceeds Class I Standard, run TCLP for that specific parameter  
 \*\*\* If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide

### ANALYSES

**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										Comments		
					VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH		% Solids	Waste Characterization
1	62R60-B03	10/11/22	0935	S	X	X					X	X	X	X	X		
2	62R60-B04		0945														
3	62R60-B02		0955														
4	62R60-B01		1005														
5	62R60-B07		1010														
6	62R60-B05		1020														
7	62R60-B06		1030														
8	62R60-B08		1110														
9	62R60-B09		1125														
10	62R60-B10	↓	1135	↓	↓	↓					↓	↓	↓	↓	↓		
11	Trip Blank #1				X												

Relinquished by <u>Azad Khodaei</u>	Date/Time <u>10/12/22 1010</u>	Received by <u>[Signature]</u>	Date/Time <u>10/12/22 1010</u>
Relinquished by <u>[Signature] RETA</u>	Date/Time <u>10/12/22 1111</u>	Received by <u>[Signature]</u>	Date/Time <u>10/12/22 1111</u>
Relinquished by	Date/Time	Received by	Date/Time



Environment Testing  
America



500-223677 Chain of Custody

### Cooler/Sample Receipt and Temperature Log Form

<b>Client Information</b>			
Client: <u>Chicago</u>			
City/State:	CITY	STATE	Project:
		<u>IL</u>	
<b>Receipt Information</b>			
Date/Time Received:	DATE	TIME	Received By:
	<u>10-25-22</u>	<u>945</u>	<u>me</u>
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
<b>Condition of Cooler/Containers</b>			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # _____ of _____	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<b>Temperature Record</b>			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID:	<u>R</u>	Correction Factor (°C):	<u>0</u>
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>—</u>	Corrected Temp (°C):	<u>—</u>
<b>Sample Container Temperature</b>			
Container(s) used:	<u>CONTAINER 1</u> <u>125 ml plastic</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):	<u>3.2</u>		
Corrected Temp (°C):	<u>3.2</u>		
<b>Exceptions Noted</b>			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding. If no, proceed with login			
<b>Additional Comments</b>			





# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

200-330 East Irving Park Road (northeast corner of Irving Park Road and Park Street)

City: Roselle State: IL Zip Code: 60172

County: DuPage Township: Bloomington

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

Latitude: 41.98382 Longitude: -88.07581  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

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

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

Estimated Volume of debris (cu. Yd.): 1

### II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATION 62R60-B02 WAS SAMPLED ADJACENT TO SITE 4386-16. SEE TABLE 3d AND FIGURE 3 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORT - EUROFINS JOB ID NUMBER: 500-223677-1.

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

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

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

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

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



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

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

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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***

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

**ISGS Site 4386-16  
Residences**

<b>Sample ID</b>	62R60-B02	<b>Maximum Allowable Concentration</b>				
<b>Sample Depth (ft)</b>	0-5	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area
<b>Sample Date</b>	10/11/2022					
<b>PID</b>	0					
<b>Sample pH</b>	8.1					
<b>Matrix</b>	Soil					
<b>No Contaminants of Concern Noted.</b>						

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223677-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/27/2022 5:53:18 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B02**

**Lab Sample ID: 500-223677-3**

**Date Collected: 10/11/22 09:55**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 87.8**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Acetone	<0.018		0.018	0.0077	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Carbon tetrachloride	<0.0018	*+	0.0018	0.00051	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
<b>Toluene</b>	<b>0.00049</b>	<b>J</b>	0.0018	0.00044	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	10/12/22 18:06	10/18/22 11:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 134	10/12/22 18:06	10/18/22 11:23	1
4-Bromofluorobenzene (Surr)	87		75 - 131	10/12/22 18:06	10/18/22 11:23	1
Dibromofluoromethane	109		75 - 126	10/12/22 18:06	10/18/22 11:23	1
Toluene-d8 (Surr)	105		75 - 124	10/12/22 18:06	10/18/22 11:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B02**

**Lab Sample ID: 500-223677-3**

**Date Collected: 10/11/22 09:55**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 87.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
<b>Benzo[a]anthracene</b>	<b>0.027</b>	<b>J</b>	0.038	0.0051	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
<b>Benzo[a]pyrene</b>	<b>0.046</b>		0.038	0.0073	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
<b>Benzo[b]fluoranthene</b>	<b>0.035</b>	<b>J</b>	0.038	0.0082	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
<b>Benzo[g,h,i]perylene</b>	<b>0.020</b>	<b>J</b>	0.038	0.012	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
<b>Chrysene</b>	<b>0.040</b>		0.038	0.010	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
<b>Fluoranthene</b>	<b>0.065</b>		0.038	0.0070	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B02**

**Lab Sample ID: 500-223677-3**

Date Collected: 10/11/22 09:55

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.023</b>	<b>J</b>	0.038	0.0098	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
<b>Phenanthrene</b>	<b>0.025</b>	<b>J</b>	0.038	0.0053	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
<b>Pyrene</b>	<b>0.062</b>		0.038	0.0075	mg/Kg	☼	10/20/22 07:24	10/25/22 18:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	95		31 - 143				10/20/22 07:24	10/25/22 18:32	1
2-Fluorobiphenyl	106		43 - 145				10/20/22 07:24	10/25/22 18:32	1
2-Fluorophenol	144		31 - 166				10/20/22 07:24	10/25/22 18:32	1
Nitrobenzene-d5 (Surr)	88		37 - 147				10/20/22 07:24	10/25/22 18:32	1
Phenol-d5	135		30 - 153				10/20/22 07:24	10/25/22 18:32	1
Terphenyl-d14 (Surr)	122		42 - 157				10/20/22 07:24	10/25/22 18:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.66</b>	<b>J F1</b>	1.1	0.22	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Arsenic</b>	<b>11</b>	<b>F1</b>	0.56	0.19	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Barium</b>	<b>47</b>		0.56	0.064	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Beryllium</b>	<b>0.91</b>		0.22	0.052	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Boron</b>	<b>7.9</b>	<b>F1</b>	2.8	0.26	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Cadmium</b>	<b>0.20</b>		0.11	0.020	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Calcium</b>	<b>32000</b>	<b>F2</b>	11	1.9	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Chromium</b>	<b>16</b>		0.56	0.28	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Cobalt</b>	<b>16</b>		0.28	0.074	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Copper</b>	<b>28</b>	<b>F1</b>	0.56	0.16	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Iron</b>	<b>21000</b>		11	5.8	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Lead</b>	<b>26</b>		0.28	0.13	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Magnesium</b>	<b>19000</b>	<b>B F2</b>	5.6	2.8	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Manganese</b>	<b>360</b>		0.56	0.081	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Nickel</b>	<b>36</b>		0.56	0.16	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Potassium</b>	<b>1900</b>	<b>F1</b>	28	9.9	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Selenium</b>	<b>0.34</b>	<b>J F1</b>	0.56	0.33	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Silver</b>	<b>0.27</b>	<b>J F1</b>	0.28	0.072	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Sodium</b>	<b>89</b>		56	8.3	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Thallium</b>	<b>0.42</b>	<b>J</b>	0.56	0.28	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Vanadium</b>	<b>21</b>		0.28	0.066	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1
<b>Zinc</b>	<b>72</b>		1.1	0.49	mg/Kg	☼	10/18/22 16:31	10/20/22 14:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/19/22 16:36	10/25/22 22:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:36	10/26/22 11:40	1
Chromium	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/25/22 22:10	1
<b>Iron</b>	<b>0.27</b>	<b>J ^2</b>	0.40	0.20	mg/L		10/19/22 16:36	10/25/22 22:10	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B02**

**Lab Sample ID: 500-223677-3**

Date Collected: 10/11/22 09:55

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 87.8

**Method: SW846 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		10/19/22 16:36	10/25/22 22:10	1
<b>Manganese</b>	<b>0.50</b>		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 11:40	1
Nickel	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/25/22 22:10	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.059</b>		0.050	0.010	mg/L		10/19/22 16:41	10/24/22 19:30	1
<b>Barium</b>	<b>0.29</b>	J	0.50	0.050	mg/L		10/19/22 16:41	10/24/22 19:30	1
<b>Beryllium</b>	<b>0.0053</b>		0.0040	0.0040	mg/L		10/19/22 16:41	10/24/22 19:30	1
<b>Boron</b>	<b>0.19</b>		0.10	0.050	mg/L		10/19/22 16:41	10/24/22 19:30	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/19/22 16:41	10/24/22 19:30	1
<b>Calcium</b>	<b>24</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 19:30	1
<b>Chromium</b>	<b>0.11</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:30	1
<b>Cobalt</b>	<b>0.036</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:30	1
<b>Iron</b>	<b>120</b>	^2	0.40	0.20	mg/L		10/19/22 16:41	10/24/22 19:30	1
<b>Lead</b>	<b>0.075</b>		0.0075	0.0075	mg/L		10/19/22 16:41	10/24/22 19:30	1
<b>Manganese</b>	<b>0.42</b>	^2	0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:30	1
<b>Nickel</b>	<b>0.15</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:30	1
<b>Potassium</b>	<b>28</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 19:30	1
Selenium	<0.050		0.050	0.020	mg/L		10/19/22 16:41	10/24/22 19:30	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:30	1
<b>Zinc</b>	<b>0.33</b>	J	0.50	0.020	mg/L		10/19/22 16:41	10/24/22 19:30	1

**Method: SW846 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		10/19/22 16:36	10/26/22 02:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/19/22 16:41	10/21/22 16:04	1
<b>Thallium</b>	<b>0.0041</b>		0.0020	0.0020	mg/L		10/19/22 16:41	10/21/22 16:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/19/22 14:10	10/20/22 12:23	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.046</b>		0.018	0.0060	mg/Kg	⊛	10/19/22 13:55	10/20/22 09:26	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.63</b>		0.24	0.12	mg/Kg	⊛	10/14/22 11:55	10/16/22 13:53	1
<b>pH (SW846 9045D)</b>	<b>8.1</b>		0.2	0.2	SU			10/18/22 15:32	1



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### 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.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Laboratory: Eurofins Chicago

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


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

## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-02-22
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23

# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com		 500-223677 COC		<b>Laboratory</b> Lab Test America - Chicago Address 2417 Bond Street University Park, IL 60484 Phone 708-534-5200 Contact Dick Wright email richard.wright@testamericainc.com		Project Name <u>AE8-003A</u> Project No <u>PTB/WO #: 195-002/1003A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>K. Hoove / S. Khodaei</u>		COC No <u>1</u> of <u>2</u> Lab Job No <u>500-223677</u> Sample Temp <u>2.4 → 2.6</u> <u>0.8 → 3.0</u>															
<b>Special Instructions:</b> 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					<b>ANALYSES</b>							<b>Matrix Key:</b> W Water S Soil SL Sludge S Sediment L Leachate DW Drinking Water OL Oil O Other											
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization					Comments		
1	62R60-B03	10/11/22	0935	S	X	X					X	X	X	X	X								
2	62R60-B04		0945																				
3	62R60-B02		0955																				
4	62R60-B01		1005																				
5	62R60-B07		1010																				
6	62R60-B05		1020																				
7	62R60-B06		1030																				
8	62R60-B08		1110																				
9	62R60-B09		1125																				
10	62R60-B10	↓	1135	↓	↓	↓					↓	↓	↓	↓	↓								
11	Trip Blank #1				X																		
Relinquished by <u>Azad Khodaei</u>		Date/Time <u>10/12/22 1010</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1010</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>	



# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

340-394 East Irving Park Road (northwest corner of Irving Park Road and Lawrence Avenue)

City: Roselle State: IL Zip Code: 60172

County: DuPage Township: Bloomington

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

Latitude: 41.98354 Longitude: -88.07109  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

IEPA Site Number(s), if assigned: BOL: 0434825089 BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

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

Estimated Volume of debris (cu. Yd.): 1

### II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATION 62R60-B05 WAS SAMPLED ADJACENT TO SITE 4386-24. SEE TABLE 3f AND FIGURE 4 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORT - EUROFINS JOB ID NUMBER: 500-223677-1.

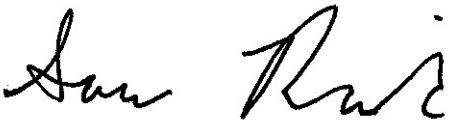
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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

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

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

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



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

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

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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***

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

**ISGS Site 4386-24  
Commercial Building**

<b>Sample ID</b>	62R60-B05	<b>Maximum Allowable Concentration</b>				
<b>Sample Depth (ft)</b>	0-5					
<b>Sample Date</b>	10/11/2022	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area
<b>PID</b>	0					
<b>Sample pH</b>	8					
<b>Matrix</b>	Soil					
<b>No Contaminants of Concern Noted.</b>						

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223677-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/27/2022 5:53:18 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B05**

**Lab Sample ID: 500-223677-6**

Date Collected: 10/11/22 10:20

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 80.7

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
1,1,1,2-Tetrachloroethane	<0.0018	*3	0.0018	0.00059	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Acetone	<0.018		0.018	0.0080	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Carbon tetrachloride	<0.0018	*+	0.0018	0.00053	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	10/12/22 18:06	10/18/22 12:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 134	10/12/22 18:06	10/18/22 12:33	1
4-Bromofluorobenzene (Surr)	88	*3	75 - 131	10/12/22 18:06	10/18/22 12:33	1
Dibromofluoromethane	109		75 - 126	10/12/22 18:06	10/18/22 12:33	1
Toluene-d8 (Surr)	110		75 - 124	10/12/22 18:06	10/18/22 12:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B05**

**Lab Sample ID: 500-223677-6**

Date Collected: 10/11/22 10:20

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 80.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
<b>Benzo[a]anthracene</b>	<b>0.0074</b>	<b>J</b>	0.040	0.0055	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
<b>Chrysene</b>	<b>0.011</b>	<b>J</b>	0.040	0.011	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
<b>Fluoranthene</b>	<b>0.014</b>	<b>J</b>	0.040	0.0075	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B05**

**Lab Sample ID: 500-223677-6**

Date Collected: 10/11/22 10:20

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 80.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Phenanthrene	<0.040		0.040	0.0057	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
Phenol	<0.20		0.20	0.090	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1
<b>Pyrene</b>	<b>0.013</b>	<b>J</b>	0.040	0.0081	mg/Kg	☼	10/20/22 07:24	10/25/22 19:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	79		31 - 143	10/20/22 07:24	10/25/22 19:41	1
2-Fluorobiphenyl	87		43 - 145	10/20/22 07:24	10/25/22 19:41	1
2-Fluorophenol	102		31 - 166	10/20/22 07:24	10/25/22 19:41	1
Nitrobenzene-d5 (Surr)	77		37 - 147	10/20/22 07:24	10/25/22 19:41	1
Phenol-d5	90		30 - 153	10/20/22 07:24	10/25/22 19:41	1
Terphenyl-d14 (Surr)	110		42 - 157	10/20/22 07:24	10/25/22 19:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.59</b>	<b>J</b>	1.2	0.24	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Arsenic</b>	<b>11</b>		0.61	0.21	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Barium</b>	<b>65</b>		0.61	0.069	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Beryllium</b>	<b>0.97</b>		0.24	0.057	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Boron</b>	<b>6.2</b>		3.0	0.28	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Cadmium</b>	<b>0.16</b>		0.12	0.022	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Calcium</b>	<b>12000</b>		12	2.1	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Chromium</b>	<b>19</b>		0.61	0.30	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Cobalt</b>	<b>15</b>		0.30	0.080	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Copper</b>	<b>29</b>		0.61	0.17	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Iron</b>	<b>24000</b>		12	6.3	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Lead</b>	<b>21</b>		0.30	0.14	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Magnesium</b>	<b>9200</b>	<b>B</b>	6.1	3.0	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Manganese</b>	<b>300</b>		0.61	0.088	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Nickel</b>	<b>40</b>		0.61	0.18	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Potassium</b>	<b>1900</b>		30	11	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Selenium</b>	<b>0.51</b>	<b>J</b>	0.61	0.36	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Silver</b>	<b>0.35</b>		0.30	0.079	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Sodium</b>	<b>240</b>		61	9.0	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Thallium</b>	<b>0.60</b>	<b>J</b>	0.61	0.30	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Vanadium</b>	<b>24</b>		0.30	0.072	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1
<b>Zinc</b>	<b>71</b>		1.2	0.54	mg/Kg	☼	10/18/22 16:31	10/20/22 15:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/19/22 16:36	10/25/22 22:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:36	10/26/22 11:50	1
Chromium	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/25/22 22:20	1
<b>Iron</b>	<b>0.31</b>	<b>J ^2</b>	0.40	0.20	mg/L		10/19/22 16:36	10/25/22 22:20	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B05**

**Lab Sample ID: 500-223677-6**

Date Collected: 10/11/22 10:20

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 80.7

**Method: SW846 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		10/19/22 16:36	10/25/22 22:20	1
<b>Manganese</b>	<b>0.65</b>		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 11:50	1
Nickel	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/25/22 22:20	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.060</b>		0.050	0.010	mg/L		10/19/22 16:41	10/24/22 19:40	1
<b>Barium</b>	<b>0.49</b>	J	0.50	0.050	mg/L		10/19/22 16:41	10/24/22 19:40	1
<b>Beryllium</b>	<b>0.0069</b>		0.0040	0.0040	mg/L		10/19/22 16:41	10/24/22 19:40	1
<b>Boron</b>	<b>0.14</b>		0.10	0.050	mg/L		10/19/22 16:41	10/24/22 19:40	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/19/22 16:41	10/24/22 19:40	1
<b>Calcium</b>	<b>27</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 19:40	1
<b>Chromium</b>	<b>0.13</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:40	1
<b>Cobalt</b>	<b>0.040</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:40	1
<b>Iron</b>	<b>150</b>	^2	0.40	0.20	mg/L		10/19/22 16:41	10/24/22 19:40	1
<b>Lead</b>	<b>0.086</b>		0.0075	0.0075	mg/L		10/19/22 16:41	10/24/22 19:40	1
<b>Manganese</b>	<b>0.54</b>	^2	0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:40	1
<b>Nickel</b>	<b>0.16</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:40	1
<b>Potassium</b>	<b>23</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 19:40	1
Selenium	<0.050		0.050	0.020	mg/L		10/19/22 16:41	10/24/22 19:40	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:40	1
<b>Zinc</b>	<b>0.44</b>	J	0.50	0.020	mg/L		10/19/22 16:41	10/24/22 19:40	1

**Method: SW846 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		10/19/22 16:36	10/26/22 02:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/19/22 16:41	10/21/22 16:14	1
<b>Thallium</b>	<b>0.0048</b>		0.0020	0.0020	mg/L		10/19/22 16:41	10/21/22 16:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/19/22 14:10	10/20/22 12:30	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.073</b>		0.019	0.0064	mg/Kg	⊛	10/19/22 13:55	10/20/22 09:32	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.90</b>		0.28	0.14	mg/Kg	⊛	10/14/22 11:55	10/16/22 14:02	1
<b>pH (SW846 9045D)</b>	<b>8.0</b>		0.2	0.2	SU			10/18/22 14:30	1



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### 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.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

Eurofins Chicago



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Laboratory: Eurofins Chicago

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

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

## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-02-22
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23

# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com		<b>Laboratory</b> Lab Test America - Chicago Address 2417 Bond Street University Park, IL 60484 Phone 708-534-5200 Contact Dick Wright email richard.wright@testamericainc.com	Project Name <u>AE8-003A</u> Project No <u>PTB/WO #: 195-002/1003A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>K. Hoove / S. Khodaei</u>	COC No <u>1</u> of <u>2</u> Lab Job No <u>500-223677</u> Sample Temp <u>2.4 → 2.6</u> <u>0.8 → 3.0</u>
--	--	--	---	---

**Special Instructions:**  
 See Table 2 for complete parameter lists and minimum reporting limits  
 \* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal  
 \*\* If SPLP result exceeds Class I Standard, run TCLP for that specific parameter  
 \*\*\* If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide

ANALYSES											
VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization
X	X					X	X	X	X	X	
↓	↓					↓	↓	↓	↓	↓	
↓	↓					↓	↓	↓	↓	↓	
↓	↓					↓	↓	↓	↓	↓	
↓	↓					↓	↓	↓	↓	↓	
↓	↓					↓	↓	↓	↓	↓	
↓	↓					↓	↓	↓	↓	↓	
↓	↓					↓	↓	↓	↓	↓	
↓	↓					↓	↓	↓	↓	↓	
X											

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments
1	62R60-B03	10/11/22	0935	S	X	X					X	X	X	X	X		
2	62R60-B04	↓	0945	↓	↓	↓					↓	↓	↓	↓	↓		
3	62R60-B02	↓	0955	↓	↓	↓					↓	↓	↓	↓	↓		
4	62R60-B01	↓	1005	↓	↓	↓					↓	↓	↓	↓	↓		
5	62R60-B07	↓	1010	↓	↓	↓					↓	↓	↓	↓	↓		
6	62R60-B05	↓	1020	↓	↓	↓					↓	↓	↓	↓	↓		
7	62R60-B06	↓	1030	↓	↓	↓					↓	↓	↓	↓	↓		
8	62R60-B08	↓	1110	↓	↓	↓					↓	↓	↓	↓	↓		
9	62R60-B09	↓	1125	↓	↓	↓					↓	↓	↓	↓	↓		
10	62R60-B10	↓	1135	↓	↓	↓					↓	↓	↓	↓	↓		
11	Trip Blank #1				X												

Relinquished by <u>Aacid Khodaei</u>	Date/Time <u>10/12/22 1010</u>	Received by <u>[Signature]</u>	Date/Time <u>10/12/22 1010</u>
Relinquished by <u>[Signature] BETA</u>	Date/Time <u>10/12/22 1111</u>	Received by <u>[Signature]</u>	Date/Time <u>10/12/22 1111</u>
Relinquished by	Date/Time	Received by	Date/Time



# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	<b>Laboratory</b> Lab <b>Test America - Chicago</b> Address <b>2417 Bond Street</b> <b>University Park, IL 60484</b> Phone <b>708-534-5200</b> Contact <b>Dick Wright</b> email richard.wright@testamericainc.com	Project Name <b>AE8-003A</b> Project No <b>PTB/WO #: 195-002/003A</b> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <b>K. Moore / S. Khodaei</b>	COC No <b>2 of 2</b> Lab Job No <b>500-223677</b> Sample Temp. <b>2.4 → 2.6</b> <b>0.8 → 1.0</b>
--	---	--	---

**Special Instructions:**  
 See Table 2 for complete parameter lists and minimum reporting limits  
 \* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal  
 \*\* If SPLP result exceeds Class I Standard, run TCLP for that specific parameter  
 \*\*\* If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide

### ANALYSES

- 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												Comments		
					VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization			
12	62R60 - B18	10/11/22	1145	S	X	X						X	X	X	X	X			
13	62R60 - B11		1150																
14	62R60 - B19		1155																
15	62R60 - B12		1205																
16	62R60 - B12 DUP		1210																
17	62R60 - B20		1220																
18	62R60 - B20 DUP		1225																
19	62R60 - B13		1230																
20	62R60 - B21	↓	1235	↓	↓	↓						↓	↓	↓	↓	↓			

Relinquished by <i>Asad Khodaei</i>	Date/Time <b>10/12/22 1010</b>	Received by <i>[Signature]</i> <b>RETA</b>	Date/Time <b>10/12/22 1010</b>
Relinquished by <i>[Signature]</i> <b>RETA</b>	Date/Time <b>10/12/22 1111</b>	Received by <i>[Signature]</i>	Date/Time <b>10/12/22 1111</b>
Relinquished by	Date/Time	Received by	Date/Time



Environment Testing  
America



500-223677 Chain of Custody

### Cooler/Sample Receipt and Temperature Log Form

<b>Client Information</b>			
Client: <u>Chicago</u>			
City/State:	CITY	STATE	Project:
		<u>IL</u>	
<b>Receipt Information</b>			
Date/Time Received:	DATE	TIME	Received By:
	<u>10-25-22</u>	<u>945</u>	<u>me</u>
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
<b>Condition of Cooler/Containers</b>			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # _____ of _____	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<b>Temperature Record</b>			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID:	<u>R</u>	Correction Factor (°C):	<u>0</u>
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>—</u>	Corrected Temp (°C):	<u>—</u>
<b>Sample Container Temperature</b>			
Container(s) used:	<u>CONTAINER 1</u> <u>125 ml plastic</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):	<u>3.2</u>		
Corrected Temp (°C):	<u>3.2</u>		
<b>Exceptions Noted</b>			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding. If no, proceed with login			
<b>Additional Comments</b>			





# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

400 East Irving Park Road (northeast corner of Irving Park Road and Lawrence Avenue)

City: Roselle State: IL Zip Code: 60172

County: DuPage Township: Bloomington

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

Latitude: 41.98339 Longitude: -88.07089  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

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

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

Estimated Volume of debris (cu. Yd.): 1

### II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATION 62R60-B06 WAS SAMPLED ADJACENT TO SITE 4386-25. SEE TABLE 3g AND FIGURE 4 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORT - EUROFINS JOB ID NUMBER: 500-223677-1.

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

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

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

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

Savo Radulovic  
Printed Name:

Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



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

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

The laboratory report for site soils follows this summary table.



**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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***

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

ISGS Site 4386-25  
BMO Harris Bank

Sample ID	62R60-B06	Maximum Allowable Concentration					
Sample Depth (ft)	0-5	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area	
Sample Date	10/11/2022						
PID	0						
Sample pH	8.4						
Matrix	Soil						
Semivolatile Organic Compounds (mg/kg)							
Benzo(a)pyrene	0.25	1,2	0.09	0.09	0.98	11.4	2.1

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223677-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/27/2022 5:53:18 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B06**

**Lab Sample ID: 500-223677-7**

**Date Collected: 10/11/22 10:30**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 85.1**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	10/12/22 18:06	10/19/22 11:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 134	10/12/22 18:06	10/19/22 11:22	1
4-Bromofluorobenzene (Surr)	90		75 - 131	10/12/22 18:06	10/19/22 11:22	1
Dibromofluoromethane	109		75 - 126	10/12/22 18:06	10/19/22 11:22	1
Toluene-d8 (Surr)	101		75 - 124	10/12/22 18:06	10/19/22 11:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B06**

**Lab Sample ID: 500-223677-7**

**Date Collected: 10/11/22 10:30**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 85.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
2-Methylnaphthalene	<0.078		0.078	0.0072	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
<b>Acenaphthene</b>	<b>0.0075</b>	<b>J</b>	0.039	0.0070	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
<b>Anthracene</b>	<b>0.015</b>	<b>J</b>	0.039	0.0065	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
<b>Benzo[a]anthracene</b>	<b>0.18</b>		0.039	0.0052	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
<b>Benzo[a]pyrene</b>	<b>0.25</b>	<b>*3</b>	0.039	0.0075	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
<b>Benzo[b]fluoranthene</b>	<b>0.41</b>	<b>*3</b>	0.039	0.0084	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
<b>Benzo[g,h,i]perylene</b>	<b>0.085</b>	<b>*3</b>	0.039	0.013	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
<b>Benzo[k]fluoranthene</b>	<b>0.14</b>	<b>*3</b>	0.039	0.011	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
<b>Chrysene</b>	<b>0.25</b>		0.039	0.011	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
<b>Dibenz(a,h)anthracene</b>	<b>0.048</b>	<b>*3</b>	0.039	0.0075	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
<b>Fluoranthene</b>	<b>0.43</b>		0.039	0.0072	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
<b>Fluorene</b>	<b>0.0061</b>	<b>J</b>	0.039	0.0055	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1

Euofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B06**

**Lab Sample ID: 500-223677-7**

Date Collected: 10/11/22 10:30

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 85.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.10</b>	<b>*3</b>	0.039	0.010	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.048	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
<b>Phenanthrene</b>	<b>0.16</b>		0.039	0.0054	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
Phenol	<0.20		0.20	0.086	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1
<b>Pyrene</b>	<b>0.40</b>		0.039	0.0077	mg/Kg	☼	10/20/22 07:24	10/25/22 20:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	93		31 - 143	10/20/22 07:24	10/25/22 20:05	1
2,4,6-Tribromophenol	91		31 - 143	10/20/22 07:24	10/26/22 13:46	1
2-Fluorobiphenyl	111		43 - 145	10/20/22 07:24	10/25/22 20:05	1
2-Fluorobiphenyl	106		43 - 145	10/20/22 07:24	10/26/22 13:46	1
2-Fluorophenol	112		31 - 166	10/20/22 07:24	10/25/22 20:05	1
2-Fluorophenol	145		31 - 166	10/20/22 07:24	10/26/22 13:46	1
Nitrobenzene-d5 (Surr)	84		37 - 147	10/20/22 07:24	10/25/22 20:05	1
Nitrobenzene-d5 (Surr)	95		37 - 147	10/20/22 07:24	10/26/22 13:46	1
Phenol-d5	90		30 - 153	10/20/22 07:24	10/25/22 20:05	1
Phenol-d5	129		30 - 153	10/20/22 07:24	10/26/22 13:46	1
Terphenyl-d14 (Surr)	133		42 - 157	10/20/22 07:24	10/25/22 20:05	1
Terphenyl-d14 (Surr)	123		42 - 157	10/20/22 07:24	10/26/22 13:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.75</b>	<b>J</b>	1.2	0.22	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Arsenic</b>	<b>11</b>		0.58	0.20	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Barium</b>	<b>62</b>		0.58	0.066	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Beryllium</b>	<b>1.0</b>		0.23	0.054	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Boron</b>	<b>7.3</b>		2.9	0.27	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Cadmium</b>	<b>0.18</b>		0.12	0.021	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Calcium</b>	<b>10000</b>		12	2.0	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Chromium</b>	<b>19</b>		0.58	0.29	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Cobalt</b>	<b>16</b>		0.29	0.076	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Copper</b>	<b>32</b>		0.58	0.16	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Iron</b>	<b>24000</b>		12	6.0	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Lead</b>	<b>26</b>		0.29	0.13	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Magnesium</b>	<b>8700</b>	<b>B</b>	5.8	2.9	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Manganese</b>	<b>420</b>		0.58	0.084	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Nickel</b>	<b>42</b>		0.58	0.17	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Potassium</b>	<b>2100</b>		29	10	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Silver</b>	<b>0.43</b>		0.29	0.075	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Sodium</b>	<b>910</b>		58	8.6	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Thallium</b>	<b>0.36</b>	<b>J</b>	0.58	0.29	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Vanadium</b>	<b>23</b>		0.29	0.068	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1
<b>Zinc</b>	<b>74</b>		1.2	0.51	mg/Kg	☼	10/18/22 16:31	10/20/22 15:31	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B06**

**Lab Sample ID: 500-223677-7**

Date Collected: 10/11/22 10:30

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 85.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/19/22 16:36	10/25/22 22:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:36	10/26/22 11:56	1
Chromium	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 11:56	1
<b>Iron</b>	<b>0.39</b>	<b>J ^2</b>	0.40	0.20	mg/L		10/19/22 16:36	10/25/22 22:33	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/19/22 16:36	10/25/22 22:33	1
<b>Manganese</b>	<b>0.58</b>		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 11:56	1
Nickel	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/25/22 22:33	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.15</b>		0.050	0.010	mg/L		10/19/22 16:41	10/24/22 19:43	1
<b>Barium</b>	<b>0.75</b>		0.50	0.050	mg/L		10/19/22 16:41	10/24/22 19:43	1
<b>Beryllium</b>	<b>0.014</b>		0.0040	0.0040	mg/L		10/19/22 16:41	10/24/22 19:43	1
<b>Boron</b>	<b>0.23</b>		0.10	0.050	mg/L		10/19/22 16:41	10/24/22 19:43	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/19/22 16:41	10/24/22 19:43	1
<b>Calcium</b>	<b>31</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 19:43	1
<b>Chromium</b>	<b>0.22</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:43	1
<b>Cobalt</b>	<b>0.096</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:43	1
<b>Iron</b>	<b>270</b>	<b>^2</b>	0.40	0.20	mg/L		10/19/22 16:41	10/24/22 19:43	1
<b>Lead</b>	<b>0.21</b>		0.0075	0.0075	mg/L		10/19/22 16:41	10/24/22 19:43	1
<b>Manganese</b>	<b>1.2</b>	<b>^2</b>	0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:43	1
<b>Nickel</b>	<b>0.35</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:43	1
<b>Potassium</b>	<b>45</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 19:43	1
Selenium	<0.050		0.050	0.020	mg/L		10/19/22 16:41	10/24/22 19:43	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:43	1
<b>Zinc</b>	<b>0.70</b>		0.50	0.020	mg/L		10/19/22 16:41	10/24/22 19:43	1

**Method: SW846 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		10/19/22 16:36	10/26/22 02:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/19/22 16:41	10/21/22 16:18	1
<b>Thallium</b>	<b>0.0064</b>		0.0020	0.0020	mg/L		10/19/22 16:41	10/21/22 16:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/19/22 14:10	10/20/22 12:32	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.041</b>		0.019	0.0063	mg/Kg	☼	10/19/22 13:55	10/20/22 09:34	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.2		1.2	0.38	mg/Kg	☼	10/25/22 09:08	10/25/22 23:50	1
<b>pH (SW846 9045D)</b>	<b>8.4</b>		0.2	0.2	SU			10/18/22 14:32	1

Euofins Chicago

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### 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.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

Eurofins Chicago

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Laboratory: Eurofins Chicago

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


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

## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-02-22
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23

# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	 500-223677 COC	<b>Laboratory</b> Lab Test America - Chicago Address 2417 Bond Street University Park, IL 60484 Phone 708-534-5200 Contact Dick Wright email richard.wright@testamericainc.com	Project Name <u>AE8-003A</u> Project No <u>PTB/WO #: 195-002/1003A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>K. Hoove / S. Khodaei</u>	COC No <u>1</u> of <u>2</u> Lab Job No <u>500-223677</u> Sample Temp <u>2.4 → 2.6</u> <u>0.8 → 2.0</u>
--	---	--	---	---

**Special Instructions:**  
 See Table 2 for complete parameter lists and minimum reporting limits  
 \* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal  
 \*\* If SPLP result exceeds Class I Standard, run TCLP for that specific parameter  
 \*\*\* If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide

ANALYSES												
VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	
X	X					X	X	X	X	X		
↓	↓					↓	↓	↓	↓	↓		
↓	↓					↓	↓	↓	↓	↓		
↓	↓					↓	↓	↓	↓	↓		
↓	↓					↓	↓	↓	↓	↓		
↓	↓					↓	↓	↓	↓	↓		
↓	↓					↓	↓	↓	↓	↓		
↓	↓					↓	↓	↓	↓	↓		
X												

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments
1	62R60-B03	10/11/22	0935	S	X	X					X	X	X	X	X		
2	62R60-B04	↓	0945	↓	↓	↓					↓	↓	↓	↓	↓		
3	62R60-B02	↓	0955	↓	↓	↓					↓	↓	↓	↓	↓		
4	62R60-B01	↓	1005	↓	↓	↓					↓	↓	↓	↓	↓		
5	62R60-B07	↓	1010	↓	↓	↓					↓	↓	↓	↓	↓		
6	62R60-B05	↓	1020	↓	↓	↓					↓	↓	↓	↓	↓		
7	62R60-B06	↓	1030	↓	↓	↓					↓	↓	↓	↓	↓		
8	62R60-B08	↓	1110	↓	↓	↓					↓	↓	↓	↓	↓		
9	62R60-B09	↓	1125	↓	↓	↓					↓	↓	↓	↓	↓		
10	62R60-B10	↓	1135	↓	↓	↓					↓	↓	↓	↓	↓		
11	Trip Blank #1				X												

Relinquished by <u>Azad Khodaei</u>	Date/Time <u>10/12/22 1010</u>	Received by <u>[Signature]</u>	Date/Time <u>10/12/22 1010</u>
Relinquished by <u>[Signature] RETA</u>	Date/Time <u>10/12/22 1111</u>	Received by <u>[Signature]</u>	Date/Time <u>10/12/22 1111</u>
Relinquished by	Date/Time	Received by	Date/Time



Environment Testing  
America



500-223677 Chain of Custody

### Cooler/Sample Receipt and Temperature Log Form

<b>Client Information</b>			
Client: <u>Chicago</u>			
City/State:	CITY	STATE	Project:
		<u>IL</u>	
<b>Receipt Information</b>			
Date/Time Received:	DATE	TIME	Received By:
	<u>10-25-22</u>	<u>945</u>	<u>me</u>
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> Lab Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____			
<b>Condition of Cooler/Containers</b>			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # _____ of _____	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
<b>Temperature Record</b>			
Coolant:	<input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE		
Thermometer ID:	<u>R</u>	Correction Factor (°C):	<u>0</u>
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	<u>—</u>	Corrected Temp (°C):	<u>—</u>
<b>Sample Container Temperature</b>			
Container(s) used:	<u>CONTAINER 1</u> <u>125 ml plastic</u>	<u>CONTAINER 2</u>	
Uncorrected Temp (°C):	<u>3.2</u>		
Corrected Temp (°C):	<u>3.2</u>		
<b>Exceptions Noted</b>			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE If yes, contact PM before proceeding. If no, proceed with login			
<b>Additional Comments</b>			









# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

655 East Irving Park Road (southeast corner of Irving Park Road and Pinecroft Drive)

City: Roselle State: IL Zip Code: 60172

County: DuPage Township: Bloomington

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

Latitude: 41.9805 Longitude: -88.0654  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

Additional BOL: 0434825065

IEPA Site Number(s), if assigned: BOL: 0434825021 BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

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

Estimated Volume of debris (cu. Yd.): 1

### II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

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



Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATION 62R60-B08 WAS SAMPLED ADJACENT TO SITE 4386-36. SEE TABLE 3h AND FIGURE 5 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORT - EUROFINS JOB ID NUMBER: 500-223677-1.

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

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

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

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

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



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

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

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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***

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

ISGS Site 4386-36  
 Dick Wickstrom offices

Sample ID	62R60-B08	Maximum Allowable Concentration					
Sample Depth (ft)	0-2	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area	
Sample Date	10/11/2022						
PID	0						
Sample pH	7.4						
Matrix	Soil						
Semivolatile Organic Compounds (mg/kg)							
Benzo(a)pyrene	0.22	1,2	0.09	0.09	0.98	11.4	2.1

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223677-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/27/2022 5:53:18 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B08**

**Lab Sample ID: 500-223677-8**

**Date Collected: 10/11/22 11:10**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 85.3**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0023		0.0023	0.00076	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
1,1,2,2-Tetrachloroethane	<0.0023		0.0023	0.00072	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
1,1,2-Trichloroethane	<0.0023		0.0023	0.00097	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
1,1-Dichloroethane	<0.0023		0.0023	0.00077	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
1,1-Dichloroethene	<0.0023		0.0023	0.00078	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
1,2-Dichloroethane	<0.0056		0.0056	0.0018	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
1,2-Dichloropropane	<0.0023		0.0023	0.00058	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
1,3-Dichloropropene, Total	<0.0023		0.0023	0.00079	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
2-Butanone (MEK)	<0.0056		0.0056	0.0025	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
2-Hexanone	<0.0056		0.0056	0.0018	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
4-Methyl-2-pentanone (MIBK)	<0.0056		0.0056	0.0017	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Acetone	<0.023		0.023	0.0098	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Benzene	<0.0023		0.0023	0.00058	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Bromodichloromethane	<0.0023		0.0023	0.00046	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Bromoform	<0.0023		0.0023	0.00066	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Bromomethane	<0.0056		0.0056	0.0021	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Carbon disulfide	<0.0056		0.0056	0.0012	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Carbon tetrachloride	<0.0023	*+	0.0023	0.00065	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Chlorobenzene	<0.0023		0.0023	0.00083	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Chloroethane	<0.0056		0.0056	0.0017	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Chloroform	<0.0023		0.0023	0.00078	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Chloromethane	<0.0056		0.0056	0.0023	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
cis-1,2-Dichloroethene	<0.0023		0.0023	0.00063	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
cis-1,3-Dichloropropene	<0.0023		0.0023	0.00068	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Dibromochloromethane	<0.0023		0.0023	0.00074	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Ethylbenzene	<0.0023		0.0023	0.0011	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Methyl tert-butyl ether	<0.0023		0.0023	0.00066	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Methylene Chloride	<0.0056		0.0056	0.0022	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Styrene	<0.0023		0.0023	0.00068	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Tetrachloroethene	<0.0023		0.0023	0.00077	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Toluene	<0.0023		0.0023	0.00057	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
trans-1,2-Dichloroethene	<0.0023		0.0023	0.0010	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
trans-1,3-Dichloropropene	<0.0023		0.0023	0.00079	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Trichloroethene	<0.0023		0.0023	0.00076	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Vinyl chloride	<0.0023		0.0023	0.0010	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1
Xylenes, Total	<0.0045		0.0045	0.00072	mg/Kg	☼	10/12/22 18:06	10/18/22 13:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 134	10/12/22 18:06	10/18/22 13:20	1
4-Bromofluorobenzene (Surr)	92		75 - 131	10/12/22 18:06	10/18/22 13:20	1
Dibromofluoromethane	106		75 - 126	10/12/22 18:06	10/18/22 13:20	1
Toluene-d8 (Surr)	104		75 - 124	10/12/22 18:06	10/18/22 13:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B08**

**Lab Sample ID: 500-223677-8**

**Date Collected: 10/11/22 11:10**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 85.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
<b>Acenaphthylene</b>	<b>0.0071</b>	<b>J</b>	0.039	0.0051	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
<b>Anthracene</b>	<b>0.014</b>	<b>J</b>	0.039	0.0065	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
<b>Benzo[a]anthracene</b>	<b>0.14</b>		0.039	0.0052	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
<b>Benzo[a]pyrene</b>	<b>0.22</b>		0.039	0.0075	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
<b>Benzo[b]fluoranthene</b>	<b>0.34</b>		0.039	0.0084	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
<b>Benzo[g,h,i]perylene</b>	<b>0.10</b>		0.039	0.013	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
<b>Benzo[k]fluoranthene</b>	<b>0.13</b>		0.039	0.011	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
<b>Chrysene</b>	<b>0.20</b>		0.039	0.011	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
<b>Dibenz(a,h)anthracene</b>	<b>0.028</b>	<b>J</b>	0.039	0.0075	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Dibenzofuran	<0.20		0.20	0.045	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
<b>Fluoranthene</b>	<b>0.32</b>		0.039	0.0072	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B08**

**Lab Sample ID: 500-223677-8**

Date Collected: 10/11/22 11:10

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.10</b>		0.039	0.010	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
<b>Phenanthrene</b>	<b>0.091</b>		0.039	0.0054	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Phenol	<0.20		0.20	0.086	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
<b>Pyrene</b>	<b>0.25</b>		0.039	0.0077	mg/Kg	☼	10/20/22 07:24	10/26/22 14:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	90		31 - 143				10/20/22 07:24	10/26/22 14:10	1
2-Fluorobiphenyl	102		43 - 145				10/20/22 07:24	10/26/22 14:10	1
2-Fluorophenol	139		31 - 166				10/20/22 07:24	10/26/22 14:10	1
Nitrobenzene-d5 (Surr)	92		37 - 147				10/20/22 07:24	10/26/22 14:10	1
Phenol-d5	122		30 - 153				10/20/22 07:24	10/26/22 14:10	1
Terphenyl-d14 (Surr)	113		42 - 157				10/20/22 07:24	10/26/22 14:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.53</b>	<b>J</b>	1.1	0.22	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Arsenic</b>	<b>8.7</b>		0.56	0.19	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Barium</b>	<b>73</b>		0.56	0.064	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Beryllium</b>	<b>0.80</b>		0.23	0.053	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Boron</b>	<b>5.8</b>		2.8	0.26	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Cadmium</b>	<b>0.26</b>		0.11	0.020	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Calcium</b>	<b>17000</b>		11	1.9	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Chromium</b>	<b>16</b>		0.56	0.28	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Cobalt</b>	<b>13</b>		0.28	0.074	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Copper</b>	<b>21</b>		0.56	0.16	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Iron</b>	<b>19000</b>		11	5.9	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Lead</b>	<b>45</b>		0.28	0.13	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Magnesium</b>	<b>12000</b>	<b>B</b>	5.6	2.8	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Manganese</b>	<b>410</b>		0.56	0.082	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Nickel</b>	<b>25</b>		0.56	0.16	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Potassium</b>	<b>1900</b>		28	10	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Selenium</b>	<b>0.51</b>	<b>J</b>	0.56	0.33	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Silver</b>	<b>0.24</b>	<b>J</b>	0.28	0.073	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Sodium</b>	<b>78</b>		56	8.3	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Vanadium</b>	<b>23</b>		0.28	0.066	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1
<b>Zinc</b>	<b>74</b>		1.1	0.49	mg/Kg	☼	10/18/22 16:31	10/20/22 15:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>0.36</b>	<b>J ^2</b>	0.40	0.20	mg/L		10/19/22 16:36	10/25/22 22:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/19/22 16:36	10/25/22 22:23	1
<b>Manganese</b>	<b>0.23</b>		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 11:53	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B08**

**Lab Sample ID: 500-223677-8**

Date Collected: 10/11/22 11:10

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 85.3

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.010	J	0.050	0.010	mg/L		10/19/22 16:41	10/24/22 19:46	1
Barium	0.19	J	0.50	0.050	mg/L		10/19/22 16:41	10/24/22 19:46	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:41	10/24/22 19:46	1
Boron	0.072	J	0.10	0.050	mg/L		10/19/22 16:41	10/24/22 19:46	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/19/22 16:41	10/24/22 19:46	1
Calcium	13		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 19:46	1
Chromium	0.050		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:46	1
Cobalt	0.011	J	0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:46	1
Iron	48	^2	0.40	0.20	mg/L		10/19/22 16:41	10/24/22 19:46	1
Lead	0.057		0.0075	0.0075	mg/L		10/19/22 16:41	10/24/22 19:46	1
Manganese	0.29	^2	0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:46	1
Nickel	0.045		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:46	1
Potassium	12		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 19:46	1
Selenium	<0.050		0.050	0.020	mg/L		10/19/22 16:41	10/24/22 19:46	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:46	1
Zinc	0.15	J	0.50	0.020	mg/L		10/19/22 16:41	10/24/22 19:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/19/22 16:41	10/21/22 16:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/19/22 16:41	10/21/22 16:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/19/22 14:10	10/20/22 12:34	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.049		0.019	0.0062	mg/Kg	⊛	10/19/22 13:55	10/20/22 09:36	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.1		1.1	0.37	mg/Kg	⊛	10/25/22 09:08	10/25/22 23:51	1
pH (SW846 9045D)	7.4		0.2	0.2	SU			10/18/22 14:35	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### 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.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

Eurofins Chicago

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Laboratory: Eurofins Chicago

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

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

## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-02-22
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23

# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com		<b>Laboratory</b> Lab Test America - Chicago Address 2417 Bond Street University Park, IL 60484 Phone 708-534-5200 Contact Dick Wright email richard.wright@testamericainc.com	Project Name <u>AE8-003A</u> Project No <u>PTB/WO #: 195-002/1003A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>K. Hoove / S. Khodaei</u>	COC No <u>1</u> of <u>2</u> Lab Job No <u>500-223677</u> Sample Temp <u>2.4 → 2.6</u> <u>0.8 → 2.0</u>
--	--	--	---	---

**Special Instructions:**  
 See Table 2 for complete parameter lists and minimum reporting limits  
 \* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal  
 \*\* If SPLP result exceeds Class I Standard, run TCLP for that specific parameter  
 \*\*\* If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide

### ANALYSES

- 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										Comments		
					VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH		% Solids	Waste Characterization
1	62R60-B03	10/11/22	0935	S	X	X					X	X	X	X	X		
2	62R60-B04		0945														
3	62R60-B02		0955														
4	62R60-B01		1005														
5	62R60-B07		1010														
6	62R60-B05		1020														
7	62R60-B06		1030														
8	62R60-B08		1110														
9	62R60-B09		1125														
10	62R60-B10	↓	1135	↓	↓	↓					↓	↓	↓	↓	↓		
11	Trip Blank #1				X												

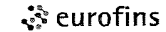
Relinquished by <u>Azad Khodaei</u>	Date/Time <u>10/12/22 1010</u>	Received by <u>[Signature]</u>	Date/Time <u>10/12/22 1010</u>
Relinquished by <u>[Signature] RETA</u>	Date/Time <u>10/12/22 1111</u>	Received by <u>[Signature]</u>	Date/Time <u>10/12/22 1111</u>
Relinquished by	Date/Time	Received by	Date/Time



**Eurofins Chicago**

2417 Bond Street  
 University Park, IL 60484  
 Phone 708-534-5200 Fax. 708-534-5211

**Chain of Custody Record**



Environment Testing  
 America

<b>Client Information (Sub Contract Lab)</b>		Sampler		Lab PM: Wright, Richard		Carrier Tracking No(s):		COC No: 500-166503 1			
Client Contact: Shipping/Receiving		Phone:		E-Mail: Richard Wrght@et.eurofinsus.com		State of Origin: Illinois		Page: Page 1 of 2			
Company Eurofins Environment Testing North Centr				Accreditations Required (See note): NELAP - Illinois				Job #: 500-223677-1			
Address: 3019 Venture Way,		Due Date Requested 10/25/2022		<b>Analysis Requested</b>						<b>Preservation Codes*</b> A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify)  Other:	
City Cedar Falls		TAT Requested (days):									
State, Zip: IA, 50613		PO #:									
Phone: 319-277-2401(Tel) 319-277-2425(Fax)		WO #:									
Email:		Project #: 50020681									
Project Name: IDOT - AE8-003		SSOW#:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers			
Site:		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		9012B/9012B_Prep Total Cyanide							
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (C=comp, G=grab)</b>	<b>Preservation Code:</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
62R60-B06 (500-223677-7)		10/11/22	10 30 Central	Solid		<input checked="" type="checkbox"/>			1		
62R60-B08 (500-223677-8)		10/11/22	11 10 Central	Solid		<input checked="" type="checkbox"/>			1		
62R60-B09 (500-223677-9)		10/11/22	11 25 Central	Solid		<input checked="" type="checkbox"/>			1		
62R60-B10 (500-223677-10)		10/11/22	11 35 Central	Solid		<input checked="" type="checkbox"/>			1		
62R60-B18 (500-223677-12)		10/11/22	11 45 Central	Solid		<input checked="" type="checkbox"/>			1		
62R60-B11 (500-223677-13)		10/11/22	11 50 Central	Solid		<input checked="" type="checkbox"/>			1		
62R60-B19 (500-223677-14)		10/11/22	11 55 Central	Solid		<input checked="" type="checkbox"/>			1		
62R60-B12 (500-223677-15)		10/11/22	12 05 Central	Solid		<input checked="" type="checkbox"/>			1		
62R60-B12 Dup (500-223677-16)		10/11/22	12 10 Central	Solid		<input checked="" type="checkbox"/>			1		
Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.											
<b>Possible Hazard Identification</b>					<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>						
Unconfirmed					<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
Deliverable Requested I, II, III, IV, Other (specify)			Primary Deliverable Rank. 1		Special Instructions/QC Requirements						
Empty Kit Relinquished by		Date		Time		Method of Shipment:					
Relinquished by		Date/Time		Company		Received by		Date/Time			
Relinquished by		Date/Time		Company		Received by		Date/Time			
Relinquished by		Date/Time		Company		Received by		Date/Time			
Custody Seals Intact:		Custody Seal No		Cooler Temperature(s) °C and Other Remarks.							
Δ Yes Δ No											

Page 172 of 175

10/27/2022







# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

805 East Irving Park Road

City: Roselle State: IL Zip Code: 60172

County: DuPage Township: Bloomington

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

Latitude: 41.97962 Longitude: -88.06189  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

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

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

Estimated Volume of debris (cu. Yd.): 43

### II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATION 62R60-B09 WAS SAMPLED ADJACENT TO SITES 4386-40 AND 4386-41. SEE TABLE 3i AND FIGURE 6 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORT - EUROFINS JOB ID NUMBER: 500-223677-1.

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

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

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

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

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



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

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

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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**

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

**ISGS Site 4386-41**

**Commercial Building**

<b>Sample ID</b>	62R60-B09	<b>Maximum Allowable Concentration</b>				
<b>Sample Depth (ft)</b>	0-2					
<b>Sample Date</b>	10/11/2022	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area
<b>PID</b>	0					
<b>Sample pH</b>	7.3					
<b>Matrix</b>	Soil					
<b>No Contaminants of Concern Noted.</b>						

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223677-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/27/2022 5:53:18 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B09**

**Lab Sample ID: 500-223677-9**

**Date Collected: 10/11/22 11:25**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 83.1**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0023		0.0023	0.00077	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
1,1,2,2-Tetrachloroethane	<0.0023		0.0023	0.00073	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
1,1,2-Trichloroethane	<0.0023		0.0023	0.00098	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
1,1-Dichloroethane	<0.0023		0.0023	0.00078	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
1,1-Dichloroethene	<0.0023		0.0023	0.00079	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
1,2-Dichloroethane	<0.0057		0.0057	0.0018	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
1,2-Dichloropropane	<0.0023		0.0023	0.00059	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
1,3-Dichloropropene, Total	<0.0023		0.0023	0.00080	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
2-Butanone (MEK)	<0.0057		0.0057	0.0025	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
2-Hexanone	<0.0057		0.0057	0.0018	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
4-Methyl-2-pentanone (MIBK)	<0.0057		0.0057	0.0017	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Acetone	<0.023		0.023	0.010	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Benzene	<0.0023		0.0023	0.00058	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Bromodichloromethane	<0.0023		0.0023	0.00047	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Bromoform	<0.0023		0.0023	0.00067	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Bromomethane	<0.0057		0.0057	0.0022	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Carbon disulfide	<0.0057		0.0057	0.0012	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Carbon tetrachloride	<0.0023	*+	0.0023	0.00066	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Chlorobenzene	<0.0023		0.0023	0.00084	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Chloroethane	<0.0057		0.0057	0.0017	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Chloroform	<0.0023		0.0023	0.00079	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Chloromethane	<0.0057		0.0057	0.0023	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
cis-1,2-Dichloroethene	<0.0023		0.0023	0.00064	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
cis-1,3-Dichloropropene	<0.0023		0.0023	0.00069	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Dibromochloromethane	<0.0023		0.0023	0.00075	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Ethylbenzene	<0.0023		0.0023	0.0011	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Methyl tert-butyl ether	<0.0023		0.0023	0.00067	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Methylene Chloride	<0.0057		0.0057	0.0023	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Styrene	<0.0023		0.0023	0.00069	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Tetrachloroethene	<0.0023		0.0023	0.00078	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Toluene	<0.0023		0.0023	0.00058	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
trans-1,2-Dichloroethene	<0.0023		0.0023	0.0010	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
trans-1,3-Dichloropropene	<0.0023		0.0023	0.00080	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Trichloroethene	<0.0023		0.0023	0.00077	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Vinyl chloride	<0.0023		0.0023	0.0010	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1
Xylenes, Total	<0.0046		0.0046	0.00073	mg/Kg	☼	10/12/22 18:06	10/18/22 13:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 134	10/12/22 18:06	10/18/22 13:43	1
4-Bromofluorobenzene (Surr)	89		75 - 131	10/12/22 18:06	10/18/22 13:43	1
Dibromofluoromethane	108		75 - 126	10/12/22 18:06	10/18/22 13:43	1
Toluene-d8 (Surr)	107		75 - 124	10/12/22 18:06	10/18/22 13:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B09**

**Lab Sample ID: 500-223677-9**

**Date Collected: 10/11/22 11:25**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 83.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
2,4-Dinitrophenol	<0.81		0.81	0.70	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
<b>Benzo[a]anthracene</b>	<b>0.046</b>		0.040	0.0054	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
<b>Benzo[a]pyrene</b>	<b>0.079</b>		0.040	0.0077	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
<b>Benzo[b]fluoranthene</b>	<b>0.12</b>		0.040	0.0086	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
<b>Benzo[g,h,i]perylene</b>	<b>0.031 J</b>		0.040	0.013	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
<b>Benzo[k]fluoranthene</b>	<b>0.049</b>		0.040	0.012	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
<b>Chrysene</b>	<b>0.069</b>		0.040	0.011	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
<b>Dibenz(a,h)anthracene</b>	<b>0.012 J</b>		0.040	0.0077	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
<b>Fluoranthene</b>	<b>0.12</b>		0.040	0.0074	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B09**

**Lab Sample ID: 500-223677-9**

Date Collected: 10/11/22 11:25

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 83.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.036</b>	<b>J</b>	0.040	0.010	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
<b>Phenanthrene</b>	<b>0.038</b>	<b>J</b>	0.040	0.0056	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
<b>Pyrene</b>	<b>0.093</b>		0.040	0.0079	mg/Kg	☼	10/20/22 07:24	10/26/22 15:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	85		31 - 143				10/20/22 07:24	10/26/22 15:01	1
2-Fluorobiphenyl	83		43 - 145				10/20/22 07:24	10/26/22 15:01	1
2-Fluorophenol	115		31 - 166				10/20/22 07:24	10/26/22 15:01	1
Nitrobenzene-d5 (Surr)	75		37 - 147				10/20/22 07:24	10/26/22 15:01	1
Phenol-d5	85		30 - 153				10/20/22 07:24	10/26/22 15:01	1
Terphenyl-d14 (Surr)	110		42 - 157				10/20/22 07:24	10/26/22 15:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.63</b>	<b>J</b>	1.2	0.23	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Arsenic</b>	<b>8.6</b>		0.60	0.20	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Barium</b>	<b>70</b>		0.60	0.068	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Beryllium</b>	<b>0.93</b>		0.24	0.056	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Boron</b>	<b>6.1</b>		3.0	0.28	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Cadmium</b>	<b>0.18</b>		0.12	0.022	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Calcium</b>	<b>4400</b>		12	2.0	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Chromium</b>	<b>18</b>		0.60	0.30	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Cobalt</b>	<b>16</b>		0.30	0.078	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Copper</b>	<b>21</b>		0.60	0.17	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Iron</b>	<b>21000</b>		12	6.2	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Lead</b>	<b>25</b>		0.30	0.14	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Magnesium</b>	<b>3600</b>	<b>B</b>	6.0	3.0	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Manganese</b>	<b>420</b>		0.60	0.087	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Nickel</b>	<b>29</b>		0.60	0.17	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Potassium</b>	<b>2200</b>		30	11	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Selenium</b>	<b>0.48</b>	<b>J</b>	0.60	0.35	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Silver</b>	<b>0.26</b>	<b>J</b>	0.30	0.077	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Sodium</b>	<b>61</b>		60	8.9	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
Thallium	<0.60		0.60	0.30	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Vanadium</b>	<b>25</b>		0.30	0.071	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1
<b>Zinc</b>	<b>68</b>		1.2	0.53	mg/Kg	☼	10/18/22 16:31	10/20/22 15:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>1.5</b>		0.40	0.20	mg/L		10/19/22 16:36	10/26/22 16:40	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/19/22 16:36	10/25/22 22:36	1
<b>Manganese</b>	<b>0.066</b>		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 12:06	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B09**

**Lab Sample ID: 500-223677-9**

Date Collected: 10/11/22 11:25

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 83.1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.012	J	0.050	0.010	mg/L		10/19/22 16:41	10/24/22 19:49	1
Barium	0.24	J	0.50	0.050	mg/L		10/19/22 16:41	10/24/22 19:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:41	10/24/22 19:49	1
Boron	0.090	J	0.10	0.050	mg/L		10/19/22 16:41	10/24/22 19:49	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/19/22 16:41	10/24/22 19:49	1
Calcium	12		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 19:49	1
Chromium	0.063		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:49	1
Cobalt	0.011	J	0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:49	1
Iron	54	^2	0.40	0.20	mg/L		10/19/22 16:41	10/24/22 19:49	1
Lead	0.033		0.0075	0.0075	mg/L		10/19/22 16:41	10/24/22 19:49	1
Manganese	0.30	^2	0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:49	1
Nickel	0.058		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:49	1
Potassium	16		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 19:49	1
Selenium	<0.050		0.050	0.020	mg/L		10/19/22 16:41	10/24/22 19:49	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 19:49	1
Zinc	0.18	J	0.50	0.020	mg/L		10/19/22 16:41	10/24/22 19:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/19/22 16:41	10/21/22 16:31	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/19/22 16:41	10/21/22 16:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/19/22 14:10	10/20/22 12:36	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.018	0.0061	mg/Kg	⊛	10/19/22 13:55	10/20/22 09:38	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.2		1.2	0.40	mg/Kg	⊛	10/25/22 09:08	10/25/22 23:52	1
pH (SW846 9045D)	7.3		0.2	0.2	SU			10/18/22 14:37	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### 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.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

Eurofins Chicago

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Laboratory: Eurofins Chicago

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

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


## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-02-22
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23



# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com		 500-223677 COC		<b>Laboratory</b> Lab Test America - Chicago Address 2417 Bond Street University Park, IL 60484 Phone 708-534-5200 Contact Dick Wright email richard.wright@testamericainc.com		Project Name <u>AE8-003A</u> Project No <u>PTB/WO #: 195-002/1003A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>K. Hoove / S. Khodaei</u>		COC No <u>1</u> of <u>2</u> Lab Job No <u>500-223677</u> Sample Temp <u>2.4 → 2.6</u> <u>0.8 → 2.0</u>															
<b>Special Instructions:</b> 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					<b>ANALYSES</b>							<b>Matrix Key:</b> W Water S Soil SL Sludge S Sediment L Leachate DW Drinking Water OL Oil O Other											
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments			
1	62R60-B03	10/11/22	0935	S	X	X					X	X	X	X	X								
2	62R60-B04		0945																				
3	62R60-B02		0955																				
4	62R60-B01		1005																				
5	62R60-B07		1010																				
6	62R60-B05		1020																				
7	62R60-B06		1030																				
8	62R60-B08		1110																				
9	62R60-B09		1125																				
10	62R60-B10	↓	1135	↓	↓	↓					↓	↓	↓	↓	↓								
11	Trip Blank #1				X																		
Relinquished by <u>Azad Khodaei</u>		Date/Time <u>10/12/22 1010</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1010</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>	
Relinquished by <u>[Signature]</u> <u>BETA</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>	
Relinquished by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>		Received by <u>[Signature]</u>		Date/Time <u>10/12/22 1111</u>	







# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

22W340-22W370 Irving Park Road (northwest corner of Irving Park Road and Sycamore Avenue)

City: Unincorporated State: IL Zip Code: 60157

County: DuPage Township: Bloomington

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

Latitude: 41.97951 Longitude: -88.06077  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

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

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

Estimated Volume of debris (cu. Yd.): 58

### II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATION 62R60-B18 WAS SAMPLED ADJACENT TO SITE 4386-43. SEE TABLE 3j AND FIGURE 6 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORT - EUROFINS JOB ID NUMBER: 500-223677-1.

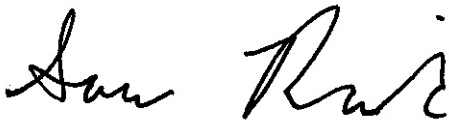
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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

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

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

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



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

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

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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***

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

ISGS Site 4386-43

Residences

Sample ID	62R60-B18	Maximum Allowable Concentration					
Sample Depth (ft)	0-2	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area	
Sample Date	10/11/2022						
PID	0						
Sample pH	9						
Matrix	Soil						
Soil Classification	(a)(3)						
Semivolatile Organic Compounds (mg/kg)							
Benzo(a)pyrene	0.23	1,2	0.09	0.09	0.98	11.4	2.1



## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223677-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/27/2022 5:53:18 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B18**

**Lab Sample ID: 500-223677-12**

**Date Collected: 10/11/22 11:45**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 87.8**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0028		0.0028	0.00093	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
1,1,1,2-Tetrachloroethane	<0.0028	*3	0.0028	0.00089	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
1,1,2-Trichloroethane	<0.0028		0.0028	0.0012	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
1,1-Dichloroethane	<0.0028		0.0028	0.00095	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
1,1-Dichloroethene	<0.0028		0.0028	0.00096	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
1,2-Dichloroethane	<0.0070		0.0070	0.0022	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
1,2-Dichloropropane	<0.0028		0.0028	0.00072	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
1,3-Dichloropropene, Total	<0.0028		0.0028	0.00098	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
2-Butanone (MEK)	<0.0070		0.0070	0.0031	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
2-Hexanone	<0.0070		0.0070	0.0022	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
4-Methyl-2-pentanone (MIBK)	<0.0070		0.0070	0.0021	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Acetone	<0.028		0.028	0.012	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Benzene	<0.0028		0.0028	0.00071	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Bromodichloromethane	<0.0028		0.0028	0.00057	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Bromoform	<0.0028		0.0028	0.00081	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Bromomethane	<0.0070		0.0070	0.0026	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Carbon disulfide	<0.0070		0.0070	0.0014	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Carbon tetrachloride	<0.0028	*+	0.0028	0.00081	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Chlorobenzene	<0.0028		0.0028	0.0010	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Chloroethane	<0.0070		0.0070	0.0021	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Chloroform	<0.0028		0.0028	0.00097	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Chloromethane	<0.0070		0.0070	0.0028	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
cis-1,2-Dichloroethene	<0.0028		0.0028	0.00078	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
cis-1,3-Dichloropropene	<0.0028		0.0028	0.00084	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Dibromochloromethane	<0.0028		0.0028	0.00091	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Ethylbenzene	<0.0028		0.0028	0.0013	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Methyl tert-butyl ether	<0.0028		0.0028	0.00082	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Methylene Chloride	<0.0070		0.0070	0.0027	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Styrene	<0.0028		0.0028	0.00084	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Tetrachloroethene	<0.0028		0.0028	0.00095	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Toluene	<0.0028		0.0028	0.00070	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
trans-1,2-Dichloroethene	<0.0028		0.0028	0.0012	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
trans-1,3-Dichloropropene	<0.0028		0.0028	0.00098	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Trichloroethene	<0.0028		0.0028	0.00094	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Vinyl chloride	<0.0028		0.0028	0.0012	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1
Xylenes, Total	<0.0056		0.0056	0.00089	mg/Kg	☼	10/12/22 18:06	10/18/22 14:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 134	10/12/22 18:06	10/18/22 14:53	1
4-Bromofluorobenzene (Surr)	92	*3	75 - 131	10/12/22 18:06	10/18/22 14:53	1
Dibromofluoromethane	109		75 - 126	10/12/22 18:06	10/18/22 14:53	1
Toluene-d8 (Surr)	106		75 - 124	10/12/22 18:06	10/18/22 14:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B18**

**Lab Sample ID: 500-223677-12**

Date Collected: 10/11/22 11:45

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
<b>Acenaphthene</b>	<b>0.0077</b>	<b>J</b>	0.036	0.0065	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
<b>Anthracene</b>	<b>0.022</b>	<b>J</b>	0.036	0.0061	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
<b>Benzo[a]anthracene</b>	<b>0.16</b>		0.036	0.0049	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
<b>Benzo[a]pyrene</b>	<b>0.23</b>		0.036	0.0070	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
<b>Benzo[b]fluoranthene</b>	<b>0.36</b>		0.036	0.0078	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
<b>Benzo[g,h,i]perylene</b>	<b>0.11</b>		0.036	0.012	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
<b>Benzo[k]fluoranthene</b>	<b>0.14</b>		0.036	0.011	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
<b>Chrysene</b>	<b>0.22</b>		0.036	0.0099	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
<b>Dibenz(a,h)anthracene</b>	<b>0.030</b>	<b>J</b>	0.036	0.0070	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
<b>Fluoranthene</b>	<b>0.38</b>		0.036	0.0067	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
<b>Fluorene</b>	<b>0.0061</b>	<b>J</b>	0.036	0.0051	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1

Euofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B18**

**Lab Sample ID: 500-223677-12**

Date Collected: 10/11/22 11:45

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.11</b>		0.036	0.0094	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
<b>Phenanthrene</b>	<b>0.14</b>		0.036	0.0051	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
<b>Pyrene</b>	<b>0.30</b>		0.036	0.0072	mg/Kg	☼	10/20/22 07:24	10/25/22 18:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	85		31 - 143				10/20/22 07:24	10/25/22 18:15	1
2-Fluorobiphenyl	89		43 - 145				10/20/22 07:24	10/25/22 18:15	1
2-Fluorophenol	125		31 - 166				10/20/22 07:24	10/25/22 18:15	1
Nitrobenzene-d5 (Surr)	79		37 - 147				10/20/22 07:24	10/25/22 18:15	1
Phenol-d5	114		30 - 153				10/20/22 07:24	10/25/22 18:15	1
Terphenyl-d14 (Surr)	115		42 - 157				10/20/22 07:24	10/25/22 18:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.51</b>	J	1.1	0.21	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Arsenic</b>	<b>7.8</b>		0.54	0.19	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Barium</b>	<b>49</b>		0.54	0.062	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Beryllium</b>	<b>0.87</b>		0.22	0.051	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Boron</b>	<b>10</b>		2.7	0.25	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Cadmium</b>	<b>0.28</b>		0.11	0.020	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Calcium</b>	<b>45000</b>		54	9.2	mg/Kg	☼	10/18/22 16:31	10/21/22 12:32	5
<b>Chromium</b>	<b>20</b>		0.54	0.27	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Cobalt</b>	<b>14</b>		0.27	0.071	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Copper</b>	<b>24</b>		0.54	0.15	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Iron</b>	<b>20000</b>		11	5.6	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Lead</b>	<b>30</b>		0.27	0.13	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Magnesium</b>	<b>18000</b>	B	5.4	2.7	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Manganese</b>	<b>350</b>		0.54	0.079	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Nickel</b>	<b>34</b>		0.54	0.16	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Potassium</b>	<b>2600</b>		27	9.6	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Silver</b>	<b>0.32</b>		0.27	0.070	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Sodium</b>	<b>860</b>		54	8.0	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Vanadium</b>	<b>23</b>		0.27	0.064	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1
<b>Zinc</b>	<b>82</b>		1.1	0.48	mg/Kg	☼	10/18/22 16:31	10/20/22 15:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/19/22 16:36	10/25/22 23:23	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:36	10/26/22 12:52	1
Chromium	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 12:52	1
Iron	<0.40		0.40	0.20	mg/L		10/19/22 16:36	10/25/22 23:23	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B18**

**Lab Sample ID: 500-223677-12**

Date Collected: 10/11/22 11:45

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 87.8

**Method: SW846 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		10/19/22 16:36	10/25/22 23:23	1
<b>Manganese</b>	<b>3.5</b>		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 16:56	1
<b>Nickel</b>	<b>0.025</b>		0.025	0.010	mg/L		10/19/22 16:36	10/25/22 23:23	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.10</b>		0.050	0.010	mg/L		10/19/22 16:41	10/24/22 20:02	1
<b>Barium</b>	<b>0.74</b>		0.50	0.050	mg/L		10/19/22 16:41	10/24/22 20:02	1
<b>Beryllium</b>	<b>0.014</b>		0.0040	0.0040	mg/L		10/19/22 16:41	10/24/22 20:02	1
<b>Boron</b>	<b>0.26</b>		0.10	0.050	mg/L		10/19/22 16:41	10/24/22 20:02	1
<b>Cadmium</b>	<b>0.0020</b>	J	0.0050	0.0020	mg/L		10/19/22 16:41	10/24/22 20:02	1
<b>Calcium</b>	<b>80</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 20:02	1
<b>Chromium</b>	<b>0.27</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:02	1
<b>Cobalt</b>	<b>0.080</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:02	1
<b>Iron</b>	<b>270</b>		0.40	0.20	mg/L		10/19/22 16:41	10/24/22 20:02	1
<b>Lead</b>	<b>0.16</b>		0.0075	0.0075	mg/L		10/19/22 16:41	10/24/22 20:02	1
<b>Manganese</b>	<b>1.1</b>	^2	0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:02	1
<b>Nickel</b>	<b>0.34</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:02	1
<b>Potassium</b>	<b>53</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 20:02	1
Selenium	<0.050		0.050	0.020	mg/L		10/19/22 16:41	10/24/22 20:02	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:02	1
<b>Zinc</b>	<b>0.79</b>		0.50	0.020	mg/L		10/19/22 16:41	10/24/22 20:02	1

**Method: SW846 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		10/19/22 16:36	10/26/22 03:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/19/22 16:41	10/21/22 16:38	1
<b>Thallium</b>	<b>0.0044</b>		0.0020	0.0020	mg/L		10/19/22 16:41	10/21/22 16:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00033		0.00033	0.00033	mg/L		10/19/22 14:10	10/20/22 12:45	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.037</b>		0.018	0.0060	mg/Kg	✱	10/19/22 13:55	10/20/22 09:52	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.1		1.1	0.36	mg/Kg	✱	10/25/22 09:08	10/25/22 23:54	1
<b>pH (SW846 9045D)</b>	<b>9.0</b>		0.2	0.2	SU			10/18/22 14:42	1



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### 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.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Laboratory: Eurofins Chicago

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

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

## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-02-22
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23





# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	<b>Laboratory</b> Lab <b>Test America - Chicago</b> Address <b>2417 Bond Street</b> <b>University Park, IL 60484</b> Phone <b>708-534-5200</b> Contact <b>Dick Wright</b> email richard.wright@testamericainc.com	Project Name <b>AE8-003A</b> Project No <b>PTB/WO #: 195-002/003A</b> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <b>K. Moore / S. Khodaei</b>	COC No <b>2 of 2</b> Lab Job No <b>500-223677</b> Sample Temp. <b>2.4 → 2.6</b> <b>0.8 → 1.0</b>
--	---	--	---

**Special Instructions:**  
 See Table 2 for complete parameter lists and minimum reporting limits  
 \* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal  
 \*\* If SPLP result exceeds Class I Standard, run TCLP for that specific parameter  
 \*\*\* If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide

### ANALYSES

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments
12	62R60 - B18	10/11/22	1145	S	X	X					X	X	X	X	X		
13	62R60 - B11		1150														
14	62R60 - B19		1155														
15	62R60 - B12		1205														
16	62R60 - B12 DUP		1210														
17	62R60 - B20		1220														
18	62R60 - B20 DUP		1225														
19	62R60 - B13		1230														
20	62R60 - B21	↓	1235	↓	↓	↓					↓	↓	↓	↓	↓		

Relinquished by <i>Asad Khodaei</i>	Date/Time <b>10/12/22 1010</b>	Received by <i>[Signature]</i> <b>RETA</b>	Date/Time <b>10/12/22 1010</b>
Relinquished by <i>[Signature]</i> <b>RETA</b>	Date/Time <b>10/12/22 1111</b>	Received by <i>[Signature]</i>	Date/Time <b>10/12/22 1111</b>
Relinquished by	Date/Time	Received by	Date/Time





# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

22W361-22W381 E. Irving Park Rd, 7N110 Sycamore Avenue (southwest corner of Irving Park Road and Sycamore Avenue)

City: Unincorporated State: IL Zip Code: 60157

County: DuPage Township: Bloomington

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

Latitude: 41.9791 Longitude: -88.0597  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

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

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

Estimated Volume of debris (cu. Yd.): 38

### II. Owner/Operator Information for Source Site

Site Owner

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

Site Operator

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

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

Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATION 62R60-B11 WAS SAMPLED ADJACENT TO SITE 4386-44. SEE TABLE 3k AND FIGURE 6 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORT - EUROFINS JOB ID NUMBER: 500-223677-1.

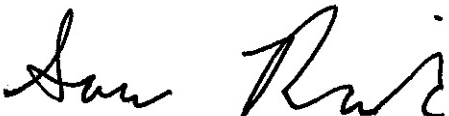
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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

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

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

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



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

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

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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***

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



**ISGS Site 4386-44**

**Residences**

Sample ID	62R60-B11	Maximum Allowable Concentration					
Sample Depth (ft)	0-2	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area	
Sample Date	10/11/2022						
PID	0						
Sample pH	8						
Matrix	Soil						
Semivolatile Organic Compounds (mg/kg)							
Benzo(a)pyrene	0.1	1,2	0.09	0.09	0.98	11.4	2.1

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223677-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/27/2022 5:53:18 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B11**

**Lab Sample ID: 500-223677-13**

**Date Collected: 10/11/22 11:50**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 78.9**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00067	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00090	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
1,1-Dichloroethane	<0.0021		0.0021	0.00072	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
1,1-Dichloroethene	<0.0021		0.0021	0.00073	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
1,2-Dichloroethane	<0.0053		0.0053	0.0016	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
1,2-Dichloropropane	<0.0021		0.0021	0.00055	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00074	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
2-Butanone (MEK)	<0.0053		0.0053	0.0023	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
2-Hexanone	<0.0053		0.0053	0.0016	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
4-Methyl-2-pentanone (MIBK)	<0.0053		0.0053	0.0016	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Acetone	<0.021		0.021	0.0092	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Benzene	<0.0021		0.0021	0.00054	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Bromodichloromethane	<0.0021		0.0021	0.00043	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Bromoform	<0.0021		0.0021	0.00062	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Bromomethane	<0.0053		0.0053	0.0020	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Carbon disulfide	<0.0053		0.0053	0.0011	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Carbon tetrachloride	<0.0021	*+	0.0021	0.00061	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Chlorobenzene	<0.0021		0.0021	0.00078	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Chloroethane	<0.0053		0.0053	0.0016	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Chloroform	<0.0021		0.0021	0.00073	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Chloromethane	<0.0053		0.0053	0.0021	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00059	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00064	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Dibromochloromethane	<0.0021		0.0021	0.00069	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00062	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Methylene Chloride	<0.0053		0.0053	0.0021	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Styrene	<0.0021		0.0021	0.00064	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Tetrachloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Toluene	<0.0021		0.0021	0.00053	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00093	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00074	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Trichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Vinyl chloride	<0.0021		0.0021	0.00093	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1
Xylenes, Total	<0.0042		0.0042	0.00067	mg/Kg	☼	10/12/22 18:06	10/18/22 15:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		70 - 134	10/12/22 18:06	10/18/22 15:16	1
4-Bromofluorobenzene (Surr)	90		75 - 131	10/12/22 18:06	10/18/22 15:16	1
Dibromofluoromethane	111		75 - 126	10/12/22 18:06	10/18/22 15:16	1
Toluene-d8 (Surr)	103		75 - 124	10/12/22 18:06	10/18/22 15:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B11**

**Lab Sample ID: 500-223677-13**

**Date Collected: 10/11/22 11:50**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 78.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.095	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
2,4-Dichlorophenol	<0.42		0.42	0.099	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
2,4-Dinitrophenol	<0.84		0.84	0.74	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
2-Methylnaphthalene	<0.084		0.084	0.0077	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.34	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Acenaphthene	<0.042		0.042	0.0075	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
<b>Anthracene</b>	<b>0.011</b>	<b>J</b>	0.042	0.0070	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
<b>Benzo[a]anthracene</b>	<b>0.069</b>		0.042	0.0056	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
<b>Benzo[a]pyrene</b>	<b>0.10</b>		0.042	0.0081	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
<b>Benzo[b]fluoranthene</b>	<b>0.17</b>		0.042	0.0090	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
<b>Benzo[g,h,i]perylene</b>	<b>0.037</b>	<b>J</b>	0.042	0.013	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
<b>Benzo[k]fluoranthene</b>	<b>0.071</b>		0.042	0.012	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
<b>Chrysene</b>	<b>0.10</b>		0.042	0.011	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
<b>Dibenz(a,h)anthracene</b>	<b>0.014</b>	<b>J</b>	0.042	0.0081	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
<b>Fluoranthene</b>	<b>0.15</b>		0.042	0.0078	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B11**

**Lab Sample ID: 500-223677-13**

Date Collected: 10/11/22 11:50

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 78.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.047</b>		0.042	0.011	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Naphthalene	<0.042		0.042	0.0064	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
<b>Phenanthrene</b>	<b>0.044</b>		0.042	0.0058	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Phenol	<0.21		0.21	0.093	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
<b>Pyrene</b>	<b>0.13</b>		0.042	0.0083	mg/Kg	☼	10/20/22 07:24	10/25/22 18:40	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	83		31 - 143				10/20/22 07:24	10/25/22 18:40	1
2-Fluorobiphenyl	71		43 - 145				10/20/22 07:24	10/25/22 18:40	1
2-Fluorophenol	91		31 - 166				10/20/22 07:24	10/25/22 18:40	1
Nitrobenzene-d5 (Surr)	55		37 - 147				10/20/22 07:24	10/25/22 18:40	1
Phenol-d5	94		30 - 153				10/20/22 07:24	10/25/22 18:40	1
Terphenyl-d14 (Surr)	120		42 - 157				10/20/22 07:24	10/25/22 18:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.47</b>	<b>J</b>	1.2	0.24	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Arsenic</b>	<b>9.1</b>		0.62	0.21	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Barium</b>	<b>53</b>		0.62	0.071	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Beryllium</b>	<b>0.91</b>		0.25	0.058	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Boron</b>	<b>11</b>		3.1	0.29	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Cadmium</b>	<b>0.29</b>		0.12	0.022	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Calcium</b>	<b>35000</b>		12	2.1	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Chromium</b>	<b>19</b>		0.62	0.31	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Cobalt</b>	<b>14</b>		0.31	0.081	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Copper</b>	<b>26</b>		0.62	0.17	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Iron</b>	<b>21000</b>		12	6.4	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Lead</b>	<b>36</b>		0.31	0.14	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Magnesium</b>	<b>21000</b>	<b>B</b>	6.2	3.1	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Manganese</b>	<b>390</b>		0.62	0.090	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Nickel</b>	<b>36</b>		0.62	0.18	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Potassium</b>	<b>2400</b>		31	11	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Selenium</b>	<b>0.59</b>	<b>J</b>	0.62	0.36	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Silver</b>	<b>0.33</b>		0.31	0.080	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Sodium</b>	<b>1300</b>		62	9.2	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
Thallium	<0.62		0.62	0.31	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Vanadium</b>	<b>22</b>		0.31	0.073	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1
<b>Zinc</b>	<b>79</b>		1.2	0.54	mg/Kg	☼	10/18/22 16:31	10/20/22 15:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/19/22 16:36	10/25/22 22:43	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:36	10/26/22 12:13	1
Chromium	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 12:13	1
<b>Iron</b>	<b>0.35</b>	<b>J ^2</b>	0.40	0.20	mg/L		10/19/22 16:36	10/25/22 22:43	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B11**

**Lab Sample ID: 500-223677-13**

Date Collected: 10/11/22 11:50

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 78.9

**Method: SW846 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		10/19/22 16:36	10/25/22 22:43	1
<b>Manganese</b>	<b>0.29</b>		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 12:13	1
Nickel	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/25/22 22:43	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.085</b>		0.050	0.010	mg/L		10/19/22 16:41	10/24/22 20:05	1
<b>Barium</b>	<b>0.94</b>		0.50	0.050	mg/L		10/19/22 16:41	10/24/22 20:05	1
<b>Beryllium</b>	<b>0.013</b>		0.0040	0.0040	mg/L		10/19/22 16:41	10/24/22 20:05	1
<b>Boron</b>	<b>0.23</b>		0.10	0.050	mg/L		10/19/22 16:41	10/24/22 20:05	1
<b>Cadmium</b>	<b>0.0032</b>	J	0.0050	0.0020	mg/L		10/19/22 16:41	10/24/22 20:05	1
<b>Calcium</b>	<b>46</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 20:05	1
<b>Chromium</b>	<b>0.25</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:05	1
<b>Cobalt</b>	<b>0.081</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:05	1
<b>Iron</b>	<b>250</b>		0.40	0.20	mg/L		10/19/22 16:41	10/24/22 20:05	1
<b>Lead</b>	<b>0.55</b>		0.0075	0.0075	mg/L		10/19/22 16:41	10/24/22 20:05	1
<b>Manganese</b>	<b>1.2</b>	^2	0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:05	1
<b>Nickel</b>	<b>0.30</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:05	1
<b>Potassium</b>	<b>44</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 20:05	1
Selenium	<0.050		0.050	0.020	mg/L		10/19/22 16:41	10/24/22 20:05	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:05	1
<b>Zinc</b>	<b>1.2</b>		0.50	0.020	mg/L		10/19/22 16:41	10/24/22 20:05	1

**Method: SW846 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		10/19/22 16:36	10/26/22 02:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/19/22 16:41	10/21/22 16:42	1
<b>Thallium</b>	<b>0.0054</b>		0.0020	0.0020	mg/L		10/19/22 16:41	10/21/22 16:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/19/22 14:10	10/20/22 12:47	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.038</b>		0.020	0.0066	mg/Kg	⊛	10/19/22 13:55	10/20/22 09:54	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.2		1.2	0.41	mg/Kg	⊛	10/25/22 09:08	10/25/22 23:55	1
<b>pH (SW846 9045D)</b>	<b>8.0</b>		0.2	0.2	SU			10/18/22 14:45	1



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### 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.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

Eurofins Chicago

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Laboratory: Eurofins Chicago

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

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

## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-02-22
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23











# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

22W118-22W300 Irving Park Rd and 22W300 block of Irving Park Rd (NE and NW corners of Irving Park Rd and Harvey Rd)

City: Unincorporated State: IL Zip Code: 60157

County: DuPage Township: Bloomington

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

Latitude: 41.97844 Longitude: -88.05967  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

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

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

Estimated Volume of debris (cu. Yd.): 258

### II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATIONS 62R60-B21, 62R60-B22 AND 62R60-B24 WERE SAMPLED ADJACENT TO SITES 4386-45 AND 4386-47. SEE TABLE 3I AND FIGURE 7 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORTS - EUROFINS JOB ID NUMBERS: 500-223677-1 AND 500-223747-1.

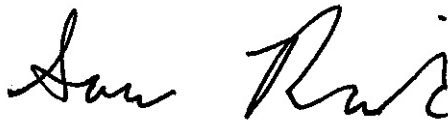
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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

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

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

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



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

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

The laboratory report for site soils follows this summary table.



**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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***

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

ISGS Site 4386-45  
Residences and Vacant  
Lot

Sample ID	62R60-B21	62R60-B22	62R60-B24	Maximum Allowable Concentration							
Sample Depth (ft)	0-2	0-2	0-2	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area			
Sample Date	10/11/2022	10/12/2022	10/12/2022								
PID	0	0	0								
Sample pH	8.1	8.1	8.7								
Matrix	Soil	Soil	Soil								
Semivolatile Organic Compounds (mg/kg)											
Benzo(a)pyrene	0.29	1,2	0.29	1,2	0.68	1,2	0.09	0.09	0.98	11.4	2.1
Benzo(b)fluoranthene	0.51		0.42		1	1,2,3	0.9	0.9	0.9	13.1	2.1
Dibenzo(a,h)anthracene	J 0.037		J 0.068		0.096	1,2	0.09	0.09	0.15	1.03	0.42

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223677-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/27/2022 5:53:18 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B21**

**Lab Sample ID: 500-223677-20**

**Date Collected: 10/11/22 12:35**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 84.4**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Acetone	<0.019		0.019	0.0082	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	10/12/22 18:06	10/19/22 12:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 134	10/12/22 18:06	10/19/22 12:33	1
4-Bromofluorobenzene (Surr)	85		75 - 131	10/12/22 18:06	10/19/22 12:33	1
Dibromofluoromethane	111		75 - 126	10/12/22 18:06	10/19/22 12:33	1
Toluene-d8 (Surr)	103		75 - 124	10/12/22 18:06	10/19/22 12:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B21**

**Lab Sample ID: 500-223677-20**

**Date Collected: 10/11/22 12:35**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 84.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
<b>Acenaphthylene</b>	<b>0.0066</b>	<b>J</b>	0.039	0.0052	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
<b>Anthracene</b>	<b>0.020</b>	<b>J</b>	0.039	0.0066	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
<b>Benzo[a]anthracene</b>	<b>0.18</b>		0.039	0.0053	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
<b>Benzo[a]pyrene</b>	<b>0.29</b>	<b>*3</b>	0.039	0.0076	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
<b>Benzo[b]fluoranthene</b>	<b>0.51</b>	<b>*3</b>	0.039	0.0085	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
<b>Benzo[g,h,i]perylene</b>	<b>0.12</b>	<b>*3</b>	0.039	0.013	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
<b>Benzo[k]fluoranthene</b>	<b>0.19</b>	<b>*3</b>	0.039	0.012	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
<b>Chrysene</b>	<b>0.25</b>		0.039	0.011	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
<b>Dibenz(a,h)anthracene</b>	<b>0.037</b>	<b>J *3</b>	0.039	0.0076	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
<b>Fluoranthene</b>	<b>0.41</b>		0.039	0.0073	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1

Euofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B21**

**Lab Sample ID: 500-223677-20**

Date Collected: 10/11/22 12:35

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 84.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.12</b>	<b>*3</b>	0.039	0.010	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
<b>Phenanthrene</b>	<b>0.11</b>		0.039	0.0055	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
<b>Pyrene</b>	<b>0.41</b>		0.039	0.0078	mg/Kg	☼	10/20/22 07:24	10/25/22 19:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	90		31 - 143				10/20/22 07:24	10/25/22 19:51	1
2-Fluorobiphenyl	94		43 - 145				10/20/22 07:24	10/25/22 19:51	1
2-Fluorophenol	128		31 - 166				10/20/22 07:24	10/25/22 19:51	1
Nitrobenzene-d5 (Surr)	82		37 - 147				10/20/22 07:24	10/25/22 19:51	1
Phenol-d5	112		30 - 153				10/20/22 07:24	10/25/22 19:51	1
Terphenyl-d14 (Surr)	151		42 - 157				10/20/22 07:24	10/25/22 19:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.78</b>	<b>J</b>	1.1	0.22	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Arsenic</b>	<b>9.6</b>		0.56	0.19	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Barium</b>	<b>81</b>		0.56	0.064	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Beryllium</b>	<b>1.1</b>		0.23	0.053	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Boron</b>	<b>9.6</b>		2.8	0.26	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Cadmium</b>	<b>0.30</b>		0.11	0.020	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Calcium</b>	<b>10000</b>		11	1.9	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Chromium</b>	<b>22</b>		0.56	0.28	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Cobalt</b>	<b>17</b>		0.28	0.074	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Copper</b>	<b>35</b>		0.56	0.16	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Iron</b>	<b>24000</b>		11	5.9	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Lead</b>	<b>66</b>		0.28	0.13	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Magnesium</b>	<b>9000</b>	<b>B</b>	5.6	2.8	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Manganese</b>	<b>410</b>		0.56	0.082	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Nickel</b>	<b>39</b>		0.56	0.16	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Potassium</b>	<b>2800</b>		28	10	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Selenium</b>	<b>0.44</b>	<b>J</b>	0.56	0.33	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Silver</b>	<b>0.40</b>		0.28	0.073	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Sodium</b>	<b>600</b>		56	8.3	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Vanadium</b>	<b>29</b>		0.28	0.067	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1
<b>Zinc</b>	<b>110</b>		1.1	0.50	mg/Kg	☼	10/18/22 16:31	10/20/22 16:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/19/22 16:36	10/25/22 23:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:36	10/26/22 12:36	1
Chromium	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 12:36	1
<b>Iron</b>	<b>0.35</b>	<b>J ^2</b>	0.40	0.20	mg/L		10/19/22 16:36	10/25/22 23:13	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B21**

**Lab Sample ID: 500-223677-20**

Date Collected: 10/11/22 12:35

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 84.4

### Method: SW846 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		10/19/22 16:36	10/25/22 23:13	1
<b>Manganese</b>	<b>0.27</b>		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 12:36	1
Nickel	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/25/22 23:13	1

### Method: SW846 6010B - Metals (ICP) - SPLP East

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.069</b>		0.050	0.010	mg/L		10/19/22 16:41	10/24/22 20:27	1
<b>Barium</b>	<b>0.76</b>		0.50	0.050	mg/L		10/19/22 16:41	10/24/22 20:27	1
<b>Beryllium</b>	<b>0.011</b>		0.0040	0.0040	mg/L		10/19/22 16:41	10/24/22 20:27	1
<b>Boron</b>	<b>0.18</b>		0.10	0.050	mg/L		10/19/22 16:41	10/24/22 20:27	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/19/22 16:41	10/24/22 20:27	1
<b>Calcium</b>	<b>23</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 20:27	1
<b>Chromium</b>	<b>0.20</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:27	1
<b>Cobalt</b>	<b>0.041</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:27	1
<b>Iron</b>	<b>200</b>		0.40	0.20	mg/L		10/19/22 16:41	10/24/22 20:27	1
<b>Lead</b>	<b>0.13</b>		0.0075	0.0075	mg/L		10/19/22 16:41	10/24/22 20:27	1
<b>Manganese</b>	<b>0.66</b>	^2	0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:27	1
<b>Nickel</b>	<b>0.25</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:27	1
<b>Potassium</b>	<b>37</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 20:27	1
Selenium	<0.050		0.050	0.020	mg/L		10/19/22 16:41	10/24/22 20:27	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:27	1
<b>Zinc</b>	<b>0.57</b>		0.50	0.020	mg/L		10/19/22 16:41	10/24/22 20:27	1

### Method: SW846 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		10/19/22 16:36	10/26/22 03:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/19/22 16:41	10/21/22 17:16	1
<b>Thallium</b>	<b>0.0039</b>		0.0020	0.0020	mg/L		10/19/22 16:41	10/21/22 17:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/19/22 14:10	10/20/22 13:02	1

### Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.058</b>		0.018	0.0060	mg/Kg	✱	10/19/22 13:55	10/20/22 10:12	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.1	H	1.1	0.37	mg/Kg	✱	10/25/22 09:08	10/26/22 00:08	1
<b>pH (SW846 9045D)</b>	<b>8.1</b>		0.2	0.2	SU			10/18/22 15:04	1



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### 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.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

Eurofins Chicago

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Laboratory: Eurofins Chicago

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

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

## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-02-22
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23



# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	<b>Laboratory</b> Lab <b>Test America - Chicago</b> Address <b>2417 Bond Street</b> <b>University Park, IL 60484</b> Phone <b>708-534-5200</b> Contact <b>Dick Wright</b> email richard.wright@testamericainc.com	Project Name <b>AE8-003A</b> Project No <b>PTB/WO #: 195-002/003A</b> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <b>K. Moore / S. Khodaei</b>	COC No <b>2 of 2</b> Lab Job No <b>500-223677</b> Sample Temp. <b>2.4 → 2.6</b> <b>0.8 → 1.0</b>
--	---	--	---

**Special Instructions:**  
 See Table 2 for complete parameter lists and minimum reporting limits  
 \* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal  
 \*\* If SPLP result exceeds Class I Standard, run TCLP for that specific parameter  
 \*\*\* If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide

### ANALYSES

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments
12	62R60 - B18	10/11/22	1145	S	X	X					X	X	X	X	X		
13	62R60 - B11		1150														
14	62R60 - B19		1155														
15	62R60 - B12		1205														
16	62R60 - B12 DUP		1210														
17	62R60 - B20		1220														
18	62R60 - B20 DUP		1225														
19	62R60 - B13		1230														
20	62R60 - B21	↓	1235	↓	↓	↓					↓	↓	↓	↓	↓		

Relinquished by <i>Asad Khodaei</i>	Date/Time <b>10/12/22 1010</b>	Received by <i>[Signature]</i> <b>RETA</b>	Date/Time <b>10/12/22 1010</b>
Relinquished by <i>[Signature]</i> <b>RETA</b>	Date/Time <b>10/12/22 1111</b>	Received by <i>[Signature]</i>	Date/Time <b>10/12/22 1111</b>
Relinquished by	Date/Time	Received by	Date/Time



## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223747-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/31/2022 3:49:46 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B22**

**Lab Sample ID: 500-223747-2**

**Date Collected: 10/12/22 09:35**

**Matrix: Solid**

**Date Received: 10/13/22 11:50**

**Percent Solids: 88.3**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0021		0.0021	0.00069	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00066	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00089	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
1,1-Dichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
1,1-Dichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
1,2-Dichloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
1,2-Dichloropropane	<0.0021		0.0021	0.00054	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00073	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
2-Butanone (MEK)	<0.0052		0.0052	0.0023	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0015	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Acetone	<0.021		0.021	0.0090	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Benzene	<0.0021		0.0021	0.00053	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Bromodichloromethane	<0.0021		0.0021	0.00042	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Bromoform	<0.0021		0.0021	0.00060	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Bromomethane	<0.0052		0.0052	0.0020	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Carbon disulfide	<0.0052		0.0052	0.0011	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Carbon tetrachloride	<0.0021		0.0021	0.00060	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Chlorobenzene	<0.0021		0.0021	0.00076	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Chloroethane	<0.0052		0.0052	0.0015	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Chloroform	<0.0021		0.0021	0.00072	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Chloromethane	<0.0052		0.0052	0.0021	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00058	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00062	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Dibromochloromethane	<0.0021		0.0021	0.00068	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Ethylbenzene	<0.0021		0.0021	0.00099	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00061	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Methylene Chloride	<0.0052		0.0052	0.0020	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Styrene	<0.0021		0.0021	0.00063	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Tetrachloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Toluene	<0.0021		0.0021	0.00052	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00092	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00073	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Trichloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Vinyl chloride	<0.0021	+	0.0021	0.00092	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1
Xylenes, Total	<0.0041		0.0041	0.00066	mg/Kg	☼	10/13/22 19:28	10/19/22 20:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	10/13/22 19:28	10/19/22 20:32	1
4-Bromofluorobenzene (Surr)	85		75 - 131	10/13/22 19:28	10/19/22 20:32	1
Dibromofluoromethane	109		75 - 126	10/13/22 19:28	10/19/22 20:32	1
Toluene-d8 (Surr)	94		75 - 124	10/13/22 19:28	10/19/22 20:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.38		0.38	0.081	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
1,2-Dichlorobenzene	<0.38		0.38	0.089	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
1,3-Dichlorobenzene	<0.38		0.38	0.084	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
1,4-Dichlorobenzene	<0.38		0.38	0.096	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
2,2'-oxybis[1-chloropropane]	<0.38		0.38	0.087	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B22**

**Lab Sample ID: 500-223747-2**

**Date Collected: 10/12/22 09:35**

**Matrix: Solid**

**Date Received: 10/13/22 11:50**

**Percent Solids: 88.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.74		0.74	0.17	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
2,4,6-Trichlorophenol	<0.74		0.74	0.26	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
2,4-Dichlorophenol	<0.74		0.74	0.18	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
2,4-Dimethylphenol	<0.74		0.74	0.28	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
2,4-Dinitrophenol	<1.5		1.5	1.3	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
2,4-Dinitrotoluene	<0.38		0.38	0.12	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
2,6-Dinitrotoluene	<0.38		0.38	0.15	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
2-Chloronaphthalene	<0.38		0.38	0.083	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
2-Chlorophenol	<0.38		0.38	0.13	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
2-Methylnaphthalene	<0.15		0.15	0.014	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
2-Methylphenol	<0.38		0.38	0.12	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
2-Nitroaniline	<0.38		0.38	0.10	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
2-Nitrophenol	<0.74		0.74	0.18	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
3 & 4 Methylphenol	<0.38		0.38	0.12	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
3,3'-Dichlorobenzidine	<0.38		0.38	0.10	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
3-Nitroaniline	<0.74		0.74	0.23	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
4,6-Dinitro-2-methylphenol	<1.5		1.5	0.60	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
4-Bromophenyl phenyl ether	<0.38		0.38	0.099	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
4-Chloro-3-methylphenol	<0.74		0.74	0.25	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
4-Chloroaniline	<1.5		1.5	0.35	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
4-Chlorophenyl phenyl ether	<0.38		0.38	0.087	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
4-Nitroaniline	<0.74		0.74	0.31	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
4-Nitrophenol	<1.5		1.5	0.71	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Acenaphthene	<0.074		0.074	0.013	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Acenaphthylene	<0.074		0.074	0.0099	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
<b>Anthracene</b>	<b>0.033</b>	<b>J</b>	0.074	0.013	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
<b>Benzo[a]anthracene</b>	<b>0.23</b>		0.074	0.010	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
<b>Benzo[a]pyrene</b>	<b>0.29</b>		0.074	0.014	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
<b>Benzo[b]fluoranthene</b>	<b>0.42</b>		0.074	0.016	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
<b>Benzo[g,h,i]perylene</b>	<b>0.22</b>		0.074	0.024	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
<b>Benzo[k]fluoranthene</b>	<b>0.14</b>		0.074	0.022	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Bis(2-chloroethoxy)methane	<0.38		0.38	0.076	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Bis(2-chloroethyl)ether	<0.38		0.38	0.11	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Bis(2-ethylhexyl) phthalate	<0.38		0.38	0.14	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Butyl benzyl phthalate	<0.38		0.38	0.14	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
<b>Carbazole</b>	<b>0.23</b>	<b>J</b>	0.38	0.19	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
<b>Chrysene</b>	<b>0.29</b>		0.074	0.020	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
<b>Dibenz(a,h)anthracene</b>	<b>0.068</b>	<b>J</b>	0.074	0.014	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Dibenzofuran	<0.38		0.38	0.088	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Diethyl phthalate	<0.38		0.38	0.13	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Dimethyl phthalate	<0.38		0.38	0.098	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Di-n-butyl phthalate	<0.38		0.38	0.11	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Di-n-octyl phthalate	<0.38		0.38	0.12	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
<b>Fluoranthene</b>	<b>0.60</b>		0.074	0.014	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Fluorene	<0.074		0.074	0.011	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Hexachlorobenzene	<0.15		0.15	0.017	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Hexachlorobutadiene	<0.38		0.38	0.12	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Hexachlorocyclopentadiene	<1.5		1.5	0.43	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2
Hexachloroethane	<0.38		0.38	0.11	mg/Kg	☼	10/24/22 07:02	10/28/22 15:02	2

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B22**

**Lab Sample ID: 500-223747-2**

Date Collected: 10/12/22 09:35

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.23</b>		0.074	0.019	mg/Kg	✳	10/24/22 07:02	10/28/22 15:02	2
Isophorone	<0.38		0.38	0.084	mg/Kg	✳	10/24/22 07:02	10/28/22 15:02	2
Naphthalene	<0.074		0.074	0.012	mg/Kg	✳	10/24/22 07:02	10/28/22 15:02	2
Nitrobenzene	<0.074		0.074	0.019	mg/Kg	✳	10/24/22 07:02	10/28/22 15:02	2
N-Nitrosodi-n-propylamine	<0.15		0.15	0.091	mg/Kg	✳	10/24/22 07:02	10/28/22 15:02	2
N-Nitrosodiphenylamine	<0.38		0.38	0.088	mg/Kg	✳	10/24/22 07:02	10/28/22 15:02	2
Pentachlorophenol	<1.5		1.5	1.2	mg/Kg	✳	10/24/22 07:02	10/28/22 15:02	2
<b>Phenanthrene</b>	<b>0.17</b>		0.074	0.010	mg/Kg	✳	10/24/22 07:02	10/28/22 15:02	2
Phenol	<0.38		0.38	0.17	mg/Kg	✳	10/24/22 07:02	10/28/22 15:02	2
<b>Pyrene</b>	<b>0.40</b>		0.074	0.015	mg/Kg	✳	10/24/22 07:02	10/28/22 15:02	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	79		31 - 143				10/24/22 07:02	10/28/22 15:02	2
2-Fluorobiphenyl	67		43 - 145				10/24/22 07:02	10/28/22 15:02	2
2-Fluorophenol	103		31 - 166				10/24/22 07:02	10/28/22 15:02	2
Nitrobenzene-d5 (Surr)	60		37 - 147				10/24/22 07:02	10/28/22 15:02	2
Phenol-d5	76		30 - 153				10/24/22 07:02	10/28/22 15:02	2
Terphenyl-d14 (Surr)	67		42 - 157				10/24/22 07:02	10/28/22 15:02	2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.80</b>	J	1.1	0.22	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Arsenic</b>	<b>8.6</b>		0.55	0.19	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Barium</b>	<b>65</b>		0.55	0.063	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Beryllium</b>	<b>1.0</b>		0.22	0.052	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Boron</b>	<b>10</b>		2.8	0.26	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Cadmium</b>	<b>0.27</b>		0.11	0.020	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Calcium</b>	<b>39000</b>		55	9.4	mg/Kg	✳	10/20/22 09:59	10/25/22 15:40	5
<b>Chromium</b>	<b>19</b>		0.55	0.27	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Cobalt</b>	<b>16</b>		0.28	0.072	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Copper</b>	<b>34</b>		0.55	0.15	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Iron</b>	<b>21000</b>	^2	11	5.8	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Lead</b>	<b>81</b>		0.28	0.13	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Magnesium</b>	<b>19000</b>	^2	5.5	2.7	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Manganese</b>	<b>370</b>	^2	0.55	0.080	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Nickel</b>	<b>37</b>		0.55	0.16	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Potassium</b>	<b>2300</b>		28	9.8	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
Selenium	<0.55		0.55	0.33	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Silver</b>	<b>0.36</b>		0.28	0.071	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Sodium</b>	<b>410</b>		55	8.2	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
Thallium	<0.55		0.55	0.28	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Vanadium</b>	<b>24</b>		0.28	0.065	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1
<b>Zinc</b>	<b>90</b>		1.1	0.49	mg/Kg	✳	10/20/22 09:59	10/24/22 20:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:40	10/27/22 10:48	1
Chromium	<0.025		0.025	0.010	mg/L		10/19/22 16:40	10/27/22 10:48	1
Iron	<0.40		0.40	0.20	mg/L		10/19/22 16:40	10/27/22 10:48	1
<b>Lead</b>	<b>0.0076</b>		0.0075	0.0075	mg/L		10/19/22 16:40	10/27/22 10:48	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B22**

**Lab Sample ID: 500-223747-2**

Date Collected: 10/12/22 09:35

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.47		0.025	0.010	mg/L		10/19/22 16:40	10/27/22 10:48	1
Nickel	<0.025		0.025	0.010	mg/L		10/19/22 16:40	10/27/22 10:48	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.049	J	0.050	0.010	mg/L		10/19/22 16:44	10/20/22 20:06	1
Barium	0.52		0.50	0.050	mg/L		10/19/22 16:44	10/20/22 20:06	1
Beryllium	0.0075		0.0040	0.0040	mg/L		10/19/22 16:44	10/20/22 20:06	1
Boron	0.21		0.10	0.050	mg/L		10/19/22 16:44	10/20/22 20:06	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/19/22 16:44	10/20/22 20:06	1
Calcium	23		2.5	0.50	mg/L		10/19/22 16:44	10/20/22 20:06	1
Chromium	0.14		0.025	0.010	mg/L		10/19/22 16:44	10/20/22 20:06	1
Cobalt	0.034		0.025	0.010	mg/L		10/19/22 16:44	10/20/22 20:06	1
Iron	140		0.40	0.20	mg/L		10/19/22 16:44	10/20/22 20:06	1
Lead	0.19		0.0075	0.0075	mg/L		10/19/22 16:44	10/20/22 20:06	1
Manganese	0.51		0.025	0.010	mg/L		10/19/22 16:44	10/20/22 20:06	1
Nickel	0.15		0.025	0.010	mg/L		10/19/22 16:44	10/20/22 20:06	1
Potassium	30		2.5	0.50	mg/L		10/19/22 16:44	10/20/22 20:06	1
Selenium	<0.050		0.050	0.020	mg/L		10/19/22 16:44	10/20/22 20:06	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:44	10/20/22 20:06	1
Zinc	0.44	J	0.50	0.020	mg/L		10/19/22 16:44	10/20/22 20:06	1

**Method: SW846 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		10/19/22 16:40	10/27/22 14:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/19/22 16:44	10/21/22 14:59	1
Thallium	0.0037		0.0020	0.0020	mg/L		10/19/22 16:44	10/21/22 14:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^1+	0.00020	0.00020	mg/L		10/22/22 12:15	10/24/22 16:54	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.054	B	0.018	0.0059	mg/Kg	☆	10/22/22 14:35	10/25/22 15:52	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.1		1.1	0.37	mg/Kg	☆	10/26/22 04:06	10/26/22 18:10	1
pH (SW846 9045D)	8.1		0.2	0.2	SU			10/18/22 16:42	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B24**

**Lab Sample ID: 500-223747-6**

**Date Collected: 10/12/22 10:00**

**Matrix: Solid**

**Date Received: 10/13/22 11:50**

**Percent Solids: 81.8**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Acetone	<0.018		0.018	0.0076	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00051	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Vinyl chloride	<0.0018	+	0.0018	0.00078	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	10/13/22 19:28	10/19/22 22:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	10/13/22 19:28	10/19/22 22:15	1
4-Bromofluorobenzene (Surr)	81		75 - 131	10/13/22 19:28	10/19/22 22:15	1
Dibromofluoromethane	106		75 - 126	10/13/22 19:28	10/19/22 22:15	1
Toluene-d8 (Surr)	92		75 - 124	10/13/22 19:28	10/19/22 22:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.40		0.40	0.086	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
1,2-Dichlorobenzene	<0.40		0.40	0.095	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
1,3-Dichlorobenzene	<0.40		0.40	0.090	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
1,4-Dichlorobenzene	<0.40		0.40	0.10	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
2,2'-oxybis[1-chloropropane]	<0.40		0.40	0.092	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B24**

**Lab Sample ID: 500-223747-6**

**Date Collected: 10/12/22 10:00**

**Matrix: Solid**

**Date Received: 10/13/22 11:50**

**Percent Solids: 81.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.79		0.79	0.18	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
2,4,6-Trichlorophenol	<0.79		0.79	0.27	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
2,4-Dichlorophenol	<0.79		0.79	0.19	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
2,4-Dimethylphenol	<0.79		0.79	0.30	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
2,4-Dinitrophenol	<1.6		1.6	1.4	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
2,4-Dinitrotoluene	<0.40		0.40	0.13	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
2,6-Dinitrotoluene	<0.40		0.40	0.16	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
2-Chloronaphthalene	<0.40		0.40	0.088	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
2-Chlorophenol	<0.40		0.40	0.14	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
2-Methylnaphthalene	<0.16		0.16	0.015	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
2-Methylphenol	<0.40		0.40	0.13	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
2-Nitroaniline	<0.40		0.40	0.11	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
2-Nitrophenol	<0.79		0.79	0.19	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
3 & 4 Methylphenol	<0.40		0.40	0.13	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
3,3'-Dichlorobenzidine	<0.40		0.40	0.11	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
3-Nitroaniline	<0.79		0.79	0.25	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
4,6-Dinitro-2-methylphenol	<1.6		1.6	0.64	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
4-Bromophenyl phenyl ether	<0.40		0.40	0.11	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
4-Chloro-3-methylphenol	<0.79		0.79	0.27	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
4-Chloroaniline	<1.6		1.6	0.37	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
4-Chlorophenyl phenyl ether	<0.40		0.40	0.093	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
4-Nitroaniline	<0.79		0.79	0.33	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
4-Nitrophenol	<1.6		1.6	0.76	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
<b>Acenaphthene</b>	<b>0.017</b>	<b>J</b>	0.079	0.014	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
Acenaphthylene	<0.079		0.079	0.011	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
<b>Anthracene</b>	<b>0.090</b>		0.079	0.013	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
<b>Benzo[a]anthracene</b>	<b>0.55</b>		0.079	0.011	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
<b>Benzo[a]pyrene</b>	<b>0.68</b>		0.079	0.015	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
<b>Benzo[b]fluoranthene</b>	<b>1.0</b>		0.079	0.017	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
<b>Benzo[g,h,i]perylene</b>	<b>0.25</b>		0.079	0.026	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
<b>Benzo[k]fluoranthene</b>	<b>0.39</b>		0.079	0.023	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
Bis(2-chloroethoxy)methane	<0.40		0.40	0.081	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
Bis(2-chloroethyl)ether	<0.40		0.40	0.12	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
Bis(2-ethylhexyl) phthalate	<0.40		0.40	0.15	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
Butyl benzyl phthalate	<0.40		0.40	0.15	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
<b>Carbazole</b>	<b>0.26</b>	<b>J</b>	0.40	0.20	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
<b>Chrysene</b>	<b>0.71</b>		0.079	0.022	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
<b>Dibenz(a,h)anthracene</b>	<b>0.096</b>		0.079	0.015	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
Dibenzofuran	<0.40		0.40	0.093	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
Diethyl phthalate	<0.40		0.40	0.13	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
Dimethyl phthalate	<0.40		0.40	0.10	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
Di-n-butyl phthalate	<0.40		0.40	0.12	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
Di-n-octyl phthalate	<0.40		0.40	0.13	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
<b>Fluoranthene</b>	<b>1.5</b>		0.079	0.015	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
<b>Fluorene</b>	<b>0.021</b>	<b>J</b>	0.079	0.011	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
Hexachlorobenzene	<0.16		0.16	0.018	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
Hexachlorobutadiene	<0.40		0.40	0.13	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
Hexachlorocyclopentadiene	<1.6		1.6	0.46	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2
Hexachloroethane	<0.40		0.40	0.12	mg/Kg	☼	10/24/22 07:02	10/28/22 16:14	2

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B24**

**Lab Sample ID: 500-223747-6**

Date Collected: 10/12/22 10:00

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.30</b>		0.079	0.021	mg/Kg	✳	10/24/22 07:02	10/28/22 16:14	2
Isophorone	<0.40		0.40	0.089	mg/Kg	✳	10/24/22 07:02	10/28/22 16:14	2
Naphthalene	<0.079		0.079	0.012	mg/Kg	✳	10/24/22 07:02	10/28/22 16:14	2
Nitrobenzene	<0.079		0.079	0.020	mg/Kg	✳	10/24/22 07:02	10/28/22 16:14	2
N-Nitrosodi-n-propylamine	<0.16		0.16	0.097	mg/Kg	✳	10/24/22 07:02	10/28/22 16:14	2
N-Nitrosodiphenylamine	<0.40		0.40	0.094	mg/Kg	✳	10/24/22 07:02	10/28/22 16:14	2
Pentachlorophenol	<1.6		1.6	1.3	mg/Kg	✳	10/24/22 07:02	10/28/22 16:14	2
<b>Phenanthrene</b>	<b>0.49</b>		0.079	0.011	mg/Kg	✳	10/24/22 07:02	10/28/22 16:14	2
Phenol	<0.40		0.40	0.18	mg/Kg	✳	10/24/22 07:02	10/28/22 16:14	2
<b>Pyrene</b>	<b>0.95</b>		0.079	0.016	mg/Kg	✳	10/24/22 07:02	10/28/22 16:14	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	82		31 - 143				10/24/22 07:02	10/28/22 16:14	2
2-Fluorobiphenyl	70		43 - 145				10/24/22 07:02	10/28/22 16:14	2
2-Fluorophenol	109		31 - 166				10/24/22 07:02	10/28/22 16:14	2
Nitrobenzene-d5 (Surr)	64		37 - 147				10/24/22 07:02	10/28/22 16:14	2
Phenol-d5	78		30 - 153				10/24/22 07:02	10/28/22 16:14	2
Terphenyl-d14 (Surr)	75		42 - 157				10/24/22 07:02	10/28/22 16:14	2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.68</b>	J	1.1	0.22	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
<b>Arsenic</b>	<b>7.5</b>		0.56	0.19	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
<b>Barium</b>	<b>42</b>		2.8	0.32	mg/Kg	✳	10/20/22 09:59	10/25/22 15:53	5
<b>Beryllium</b>	<b>0.81</b>		0.22	0.052	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
<b>Boron</b>	<b>10</b>		2.8	0.26	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
<b>Cadmium</b>	<b>0.28</b>		0.11	0.020	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
<b>Calcium</b>	<b>77000</b>		56	9.5	mg/Kg	✳	10/20/22 09:59	10/25/22 15:53	5
<b>Chromium</b>	<b>17</b>		0.56	0.28	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
<b>Cobalt</b>	<b>12</b>		0.28	0.073	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
<b>Copper</b>	<b>26</b>		0.56	0.16	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
<b>Iron</b>	<b>22000</b>		56	29	mg/Kg	✳	10/20/22 09:59	10/25/22 15:53	5
<b>Lead</b>	<b>36</b>		0.28	0.13	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
<b>Magnesium</b>	<b>46000</b>		28	14	mg/Kg	✳	10/20/22 09:59	10/25/22 15:53	5
<b>Manganese</b>	<b>440</b>		2.8	0.40	mg/Kg	✳	10/20/22 09:59	10/25/22 15:53	5
<b>Nickel</b>	<b>29</b>		0.56	0.16	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
<b>Potassium</b>	<b>2200</b>		28	9.9	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
Selenium	<0.56		0.56	0.33	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
<b>Silver</b>	<b>0.29</b>		0.28	0.072	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
<b>Sodium</b>	<b>1500</b>		56	8.3	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
<b>Thallium</b>	<b>0.45</b>	J	0.56	0.28	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
<b>Vanadium</b>	<b>19</b>		0.28	0.066	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1
<b>Zinc</b>	<b>78</b>		1.1	0.49	mg/Kg	✳	10/20/22 09:59	10/24/22 21:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/19/22 16:40	10/27/22 11:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:40	10/27/22 11:44	1
Chromium	<0.025		0.025	0.010	mg/L		10/19/22 16:40	10/27/22 11:44	1
<b>Iron</b>	<b>0.20</b>	J	0.40	0.20	mg/L		10/19/22 16:40	10/27/22 11:44	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B24**

**Lab Sample ID: 500-223747-6**

Date Collected: 10/12/22 10:00

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0082		0.0075	0.0075	mg/L		10/19/22 16:40	10/27/22 11:44	1
Manganese	5.1		0.025	0.010	mg/L		10/19/22 16:40	10/27/22 11:44	1
Nickel	0.070		0.025	0.010	mg/L		10/19/22 16:40	10/27/22 11:44	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.097		0.050	0.010	mg/L		10/19/22 16:44	10/20/22 20:25	1
Barium	0.53		0.50	0.050	mg/L		10/19/22 16:44	10/20/22 20:25	1
Beryllium	0.010		0.0040	0.0040	mg/L		10/19/22 16:44	10/20/22 20:25	1
Boron	0.19		0.10	0.050	mg/L		10/19/22 16:44	10/20/22 20:25	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/19/22 16:44	10/20/22 20:25	1
Calcium	37		2.5	0.50	mg/L		10/19/22 16:44	10/20/22 20:25	1
Chromium	0.21		0.025	0.010	mg/L		10/19/22 16:44	10/20/22 20:25	1
Cobalt	0.075		0.025	0.010	mg/L		10/19/22 16:44	10/20/22 20:25	1
Iron	220		0.40	0.20	mg/L		10/19/22 16:44	10/20/22 20:25	1
Lead	0.23		0.0075	0.0075	mg/L		10/19/22 16:44	10/20/22 20:25	1
Manganese	0.98		0.025	0.010	mg/L		10/19/22 16:44	10/20/22 20:25	1
Nickel	0.29		0.025	0.010	mg/L		10/19/22 16:44	10/20/22 20:25	1
Potassium	36		2.5	0.50	mg/L		10/19/22 16:44	10/20/22 20:25	1
Selenium	<0.050		0.050	0.020	mg/L		10/19/22 16:44	10/20/22 20:25	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:44	10/20/22 20:25	1
Zinc	0.86		0.50	0.020	mg/L		10/19/22 16:44	10/21/22 12:46	1

**Method: SW846 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		10/19/22 16:40	10/27/22 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/19/22 16:44	10/21/22 15:20	1
Thallium	0.0055		0.0020	0.0020	mg/L		10/19/22 16:44	10/21/22 15:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.0010	^1+	0.0010	0.0010	mg/L		10/22/22 12:15	10/24/22 17:19	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032	B	0.019	0.0063	mg/Kg	✱	10/22/22 14:35	10/25/22 16:04	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.2		1.2	0.39	mg/Kg	✱	10/26/22 04:06	10/26/22 18:20	1
pH (SW846 9045D)	8.7		0.2	0.2	SU			10/18/22 16:47	1



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
^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.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, 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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

## Laboratory: Eurofins Chicago

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

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

## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-01-23
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23





# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

22W049-22W307 Irving Park Rd, 7N101 Sycamore Ave, 7N040 Harvey Rd (SE and SW corners of Irving Park Rd & Harvey Rd)

City: Unincorporated State: IL Zip Code: 60157

County: DuPage Township: Bloomington

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

Latitude: 41.97843 Longitude: -88.05767  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

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

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

Estimated Volume of debris (cu. Yd.): 339

### II. Owner/Operator Information for Source Site

Site Owner

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

Site Operator

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

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

Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATIONS 62R60-B12 62R60-B13, AND 62R60-B14 WERE SAMPLED ADJACENT TO SITE 4386-46. SEE TABLE 3m AND FIGURES 6 AND 7 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORTS - EUROFINS JOB ID NUMBERS: 500-223677-1 AND 500-223747-1.

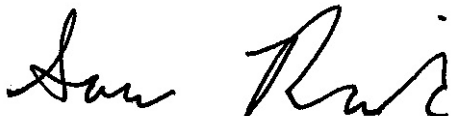
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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

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

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

Savo Radulovic  
Printed Name:



\_\_\_\_\_  
Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



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

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

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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**

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



ISGS Site 4386-46

Residences

Sample ID	62R60-B12	62R60-B12 DUP	62R60-B13	62R60-B14	Maximum Allowable Concentration						
Sample Depth (ft)	0-2	0-2	0-2	0-2	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area		
Sample Date	10/11/2022	10/11/2022	10/11/2022	10/12/2022							
PID	0	0	0	0							
Sample pH	7.6	7.5	7.7	7.8							
Matrix	Soil	Soil	Soil	Soil							
Semivolatile Organic Compounds (mg/kg)											
Benzo(a)pyrene	0.047	0.12	1.2	0.17	1.2	J 0.013	0.09	0.09	0.98	11.4	2.1

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223677-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/27/2022 5:53:18 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B12**

**Lab Sample ID: 500-223677-15**

Date Collected: 10/11/22 12:05

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 78.1

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0021		0.0021	0.00069	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00066	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00089	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
1,1-Dichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
1,1-Dichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
1,2-Dichloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
1,2-Dichloropropane	<0.0021		0.0021	0.00053	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00073	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
2-Butanone (MEK)	<0.0052		0.0052	0.0023	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0015	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Acetone	<0.021		0.021	0.0090	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Benzene	<0.0021		0.0021	0.00053	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Bromodichloromethane	<0.0021		0.0021	0.00042	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Bromoform	<0.0021		0.0021	0.00060	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Bromomethane	<0.0052		0.0052	0.0020	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Carbon disulfide	<0.0052		0.0052	0.0011	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Carbon tetrachloride	<0.0021	*+	0.0021	0.00060	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Chlorobenzene	<0.0021		0.0021	0.00076	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Chloroethane	<0.0052		0.0052	0.0015	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Chloroform	<0.0021		0.0021	0.00072	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Chloromethane	<0.0052		0.0052	0.0021	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00058	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00062	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Dibromochloromethane	<0.0021		0.0021	0.00068	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Ethylbenzene	<0.0021		0.0021	0.00099	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00061	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Methylene Chloride	<0.0052		0.0052	0.0020	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Styrene	<0.0021		0.0021	0.00062	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Tetrachloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Toluene	<0.0021		0.0021	0.00052	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00092	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00073	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Trichloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Vinyl chloride	<0.0021		0.0021	0.00091	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1
Xylenes, Total	<0.0041		0.0041	0.00066	mg/Kg	☼	10/12/22 18:06	10/18/22 16:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 134	10/12/22 18:06	10/18/22 16:03	1
4-Bromofluorobenzene (Surr)	88		75 - 131	10/12/22 18:06	10/18/22 16:03	1
Dibromofluoromethane	111		75 - 126	10/12/22 18:06	10/18/22 16:03	1
Toluene-d8 (Surr)	102		75 - 124	10/12/22 18:06	10/18/22 16:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B12**

**Lab Sample ID: 500-223677-15**

**Date Collected: 10/11/22 12:05**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 78.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
2,4-Dinitrophenol	<0.85		0.85	0.74	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
2-Methylnaphthalene	<0.085		0.085	0.0077	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Acenaphthene	<0.042		0.042	0.0075	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
<b>Benzo[a]anthracene</b>	<b>0.033</b>	<b>J</b>	0.042	0.0056	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
<b>Benzo[a]pyrene</b>	<b>0.047</b>		0.042	0.0081	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
<b>Benzo[b]fluoranthene</b>	<b>0.076</b>		0.042	0.0091	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
<b>Benzo[g,h,i]perylene</b>	<b>0.024</b>	<b>J</b>	0.042	0.014	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
<b>Benzo[k]fluoranthene</b>	<b>0.026</b>	<b>J</b>	0.042	0.012	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
<b>Carbazole</b>	<b>0.12</b>	<b>J</b>	0.21	0.10	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
<b>Chrysene</b>	<b>0.041</b>	<b>J</b>	0.042	0.011	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
<b>Fluoranthene</b>	<b>0.055</b>		0.042	0.0078	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Hexachlorobenzene	<0.085		0.085	0.0097	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B12**

**Lab Sample ID: 500-223677-15**

Date Collected: 10/11/22 12:05

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 78.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.025</b>	<b>J</b>	0.042	0.011	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.051	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Pentachlorophenol	<0.85		0.85	0.67	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
<b>Phenanthrene</b>	<b>0.016</b>	<b>J</b>	0.042	0.0058	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Phenol	<0.21		0.21	0.093	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
<b>Pyrene</b>	<b>0.037</b>	<b>J</b>	0.042	0.0083	mg/Kg	☼	10/20/22 07:24	10/26/22 16:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	59		31 - 143				10/20/22 07:24	10/26/22 16:21	1
2-Fluorobiphenyl	50		43 - 145				10/20/22 07:24	10/26/22 16:21	1
2-Fluorophenol	78		31 - 166				10/20/22 07:24	10/26/22 16:21	1
Nitrobenzene-d5 (Surr)	48		37 - 147				10/20/22 07:24	10/26/22 16:21	1
Phenol-d5	80		30 - 153				10/20/22 07:24	10/26/22 16:21	1
Terphenyl-d14 (Surr)	94		42 - 157				10/20/22 07:24	10/26/22 16:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.72</b>	<b>J</b>	1.2	0.24	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Arsenic</b>	<b>8.3</b>		0.61	0.21	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Barium</b>	<b>66</b>		0.61	0.069	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Beryllium</b>	<b>0.97</b>		0.24	0.057	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Boron</b>	<b>8.3</b>		3.0	0.28	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Cadmium</b>	<b>0.58</b>		0.12	0.022	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Calcium</b>	<b>7700</b>		12	2.1	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Chromium</b>	<b>20</b>		0.61	0.30	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Cobalt</b>	<b>13</b>		0.30	0.080	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Copper</b>	<b>34</b>		0.61	0.17	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Iron</b>	<b>21000</b>		12	6.3	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Lead</b>	<b>130</b>		0.30	0.14	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Magnesium</b>	<b>6100</b>	<b>B</b>	6.1	3.0	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Manganese</b>	<b>340</b>		0.61	0.088	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Nickel</b>	<b>29</b>		0.61	0.18	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Potassium</b>	<b>2400</b>		30	11	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Selenium</b>	<b>0.52</b>	<b>J</b>	0.61	0.36	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Silver</b>	<b>0.29</b>	<b>J</b>	0.30	0.079	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Sodium</b>	<b>2800</b>		61	9.0	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
Thallium	<0.61		0.61	0.30	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Vanadium</b>	<b>25</b>		0.30	0.072	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1
<b>Zinc</b>	<b>110</b>		1.2	0.54	mg/Kg	☼	10/18/22 16:31	10/20/22 16:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/19/22 16:36	10/25/22 22:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:36	10/26/22 12:19	1
Chromium	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 12:19	1
Iron	<0.40		0.40	0.20	mg/L		10/19/22 16:36	10/26/22 16:43	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B12**

**Lab Sample ID: 500-223677-15**

Date Collected: 10/11/22 12:05

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 78.1

**Method: SW846 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		10/19/22 16:36	10/25/22 22:50	1
<b>Manganese</b>	<b>0.60</b>		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 12:19	1
Nickel	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/25/22 22:50	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.086</b>		0.050	0.010	mg/L		10/19/22 16:41	10/24/22 20:11	1
<b>Barium</b>	<b>0.81</b>		0.50	0.050	mg/L		10/19/22 16:41	10/24/22 20:11	1
<b>Beryllium</b>	<b>0.013</b>		0.0040	0.0040	mg/L		10/19/22 16:41	10/24/22 20:11	1
<b>Boron</b>	<b>0.20</b>		0.10	0.050	mg/L		10/19/22 16:41	10/24/22 20:11	1
<b>Cadmium</b>	<b>0.0024</b>	J	0.0050	0.0020	mg/L		10/19/22 16:41	10/24/22 20:11	1
<b>Calcium</b>	<b>29</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 20:11	1
<b>Chromium</b>	<b>0.28</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:11	1
<b>Cobalt</b>	<b>0.092</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:11	1
<b>Iron</b>	<b>270</b>		0.40	0.20	mg/L		10/19/22 16:41	10/24/22 20:11	1
<b>Lead</b>	<b>0.35</b>		0.0075	0.0075	mg/L		10/19/22 16:41	10/24/22 20:11	1
<b>Manganese</b>	<b>1.5</b>	^2	0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:11	1
<b>Nickel</b>	<b>0.34</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:11	1
<b>Potassium</b>	<b>45</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 20:11	1
Selenium	<0.050		0.050	0.020	mg/L		10/19/22 16:41	10/24/22 20:11	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:11	1
<b>Zinc</b>	<b>0.96</b>		0.50	0.020	mg/L		10/19/22 16:41	10/24/22 20:11	1

**Method: SW846 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		10/19/22 16:36	10/26/22 02:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/19/22 16:41	10/21/22 16:48	1
<b>Thallium</b>	<b>0.0055</b>		0.0020	0.0020	mg/L		10/19/22 16:41	10/21/22 16:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/19/22 14:10	10/20/22 12:51	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.059</b>		0.020	0.0067	mg/Kg	⊛	10/19/22 13:55	10/20/22 09:58	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.3	H	1.3	0.42	mg/Kg	⊛	10/25/22 09:08	10/26/22 00:03	1
<b>pH (SW846 9045D)</b>	<b>7.6</b>		0.2	0.2	SU			10/18/22 14:52	1



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B12 Dup**

**Lab Sample ID: 500-223677-16**

**Date Collected: 10/11/22 12:10**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 77.7**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0022		0.0022	0.00074	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00071	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00095	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
1,1-Dichloroethane	<0.0022		0.0022	0.00076	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
1,1-Dichloroethene	<0.0022		0.0022	0.00076	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
1,2-Dichloroethane	<0.0055		0.0055	0.0017	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
1,2-Dichloropropane	<0.0022		0.0022	0.00057	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
1,3-Dichloropropene, Total	<0.0022		0.0022	0.00078	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
2-Butanone (MEK)	<0.0055		0.0055	0.0025	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
2-Hexanone	<0.0055		0.0055	0.0017	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
4-Methyl-2-pentanone (MIBK)	<0.0055		0.0055	0.0016	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Acetone	<0.022		0.022	0.0097	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Benzene	<0.0022		0.0022	0.00057	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Bromodichloromethane	<0.0022		0.0022	0.00045	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Bromoform	<0.0022		0.0022	0.00065	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Bromomethane	<0.0055		0.0055	0.0021	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Carbon disulfide	<0.0055		0.0055	0.0012	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Carbon tetrachloride	<0.0022	*+	0.0022	0.00064	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Chlorobenzene	<0.0022		0.0022	0.00082	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Chloroethane	<0.0055		0.0055	0.0016	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Chloroform	<0.0022		0.0022	0.00077	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Chloromethane	<0.0055		0.0055	0.0022	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00062	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00067	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Dibromochloromethane	<0.0022		0.0022	0.00073	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Ethylbenzene	<0.0022		0.0022	0.0011	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00065	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Methylene Chloride	<0.0055		0.0055	0.0022	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Styrene	<0.0022		0.0022	0.00067	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Tetrachloroethene	<0.0022		0.0022	0.00076	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Toluene	<0.0022		0.0022	0.00056	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00098	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00078	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Trichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Vinyl chloride	<0.0022		0.0022	0.00098	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1
Xylenes, Total	<0.0044		0.0044	0.00071	mg/Kg	☼	10/12/22 18:06	10/18/22 16:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 134	10/12/22 18:06	10/18/22 16:26	1
4-Bromofluorobenzene (Surr)	85		75 - 131	10/12/22 18:06	10/18/22 16:26	1
Dibromofluoromethane	107		75 - 126	10/12/22 18:06	10/18/22 16:26	1
Toluene-d8 (Surr)	103		75 - 124	10/12/22 18:06	10/18/22 16:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B12 Dup**

**Lab Sample ID: 500-223677-16**

**Date Collected: 10/11/22 12:10**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 77.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.095	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
2,4-Dichlorophenol	<0.42		0.42	0.099	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
2,4-Dinitrophenol	<0.84		0.84	0.74	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
2-Methylnaphthalene	<0.084		0.084	0.0077	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.34	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
4-Nitroaniline	<0.42		0.42	0.17	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Acenaphthene	<0.042		0.042	0.0075	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
<b>Benzo[a]anthracene</b>	<b>0.070</b>		0.042	0.0056	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
<b>Benzo[a]pyrene</b>	<b>0.12</b>		0.042	0.0081	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
<b>Benzo[b]fluoranthene</b>	<b>0.18</b>		0.042	0.0090	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
<b>Benzo[g,h,i]perylene</b>	<b>0.049</b>		0.042	0.013	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
<b>Benzo[k]fluoranthene</b>	<b>0.060</b>		0.042	0.012	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
<b>Chrysene</b>	<b>0.083</b>		0.042	0.011	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
<b>Dibenz(a,h)anthracene</b>	<b>0.017 J</b>		0.042	0.0081	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
<b>Fluoranthene</b>	<b>0.087</b>		0.042	0.0078	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B12 Dup**

**Lab Sample ID: 500-223677-16**

Date Collected: 10/11/22 12:10

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 77.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.052</b>		0.042	0.011	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Naphthalene	<0.042		0.042	0.0064	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
<b>Phenanthrene</b>	<b>0.014</b>	<b>J</b>	0.042	0.0058	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Phenol	<0.21		0.21	0.093	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
<b>Pyrene</b>	<b>0.079</b>		0.042	0.0083	mg/Kg	☼	10/20/22 07:24	10/26/22 14:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	80		31 - 143				10/20/22 07:24	10/26/22 14:38	1
2-Fluorobiphenyl	63		43 - 145				10/20/22 07:24	10/26/22 14:38	1
2-Fluorophenol	99		31 - 166				10/20/22 07:24	10/26/22 14:38	1
Nitrobenzene-d5 (Surr)	58		37 - 147				10/20/22 07:24	10/26/22 14:38	1
Phenol-d5	94		30 - 153				10/20/22 07:24	10/26/22 14:38	1
Terphenyl-d14 (Surr)	121		42 - 157				10/20/22 07:24	10/26/22 14:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.70</b>	<b>J</b>	1.2	0.24	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Arsenic</b>	<b>9.9</b>		0.62	0.21	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Barium</b>	<b>71</b>		0.62	0.070	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Beryllium</b>	<b>1.3</b>		0.25	0.058	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Boron</b>	<b>7.3</b>		3.1	0.29	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Cadmium</b>	<b>0.16</b>		0.12	0.022	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Calcium</b>	<b>2600</b>		12	2.1	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Chromium</b>	<b>26</b>		0.62	0.31	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Cobalt</b>	<b>16</b>		0.31	0.081	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Copper</b>	<b>27</b>		0.62	0.17	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Iron</b>	<b>28000</b>		12	6.4	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Lead</b>	<b>23</b>		0.31	0.14	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Magnesium</b>	<b>5500</b>	<b>B</b>	6.2	3.1	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Manganese</b>	<b>290</b>		0.62	0.089	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Nickel</b>	<b>47</b>		0.62	0.18	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Potassium</b>	<b>2900</b>		31	11	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Selenium</b>	<b>0.44</b>	<b>J</b>	0.62	0.36	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Silver</b>	<b>0.41</b>		0.31	0.080	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Sodium</b>	<b>3100</b>		62	9.1	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
Thallium	<0.62		0.62	0.31	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Vanadium</b>	<b>31</b>		0.31	0.073	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1
<b>Zinc</b>	<b>82</b>		1.2	0.54	mg/Kg	☼	10/18/22 16:31	10/20/22 16:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/19/22 16:36	10/25/22 22:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:36	10/26/22 12:23	1
Chromium	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 12:23	1
Iron	<0.40		0.40	0.20	mg/L		10/19/22 16:36	10/26/22 16:46	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B12 Dup**

**Lab Sample ID: 500-223677-16**

Date Collected: 10/11/22 12:10

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 77.7

**Method: SW846 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		10/19/22 16:36	10/25/22 22:53	1
Manganese	2.0		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 12:23	1
Nickel	0.012	J	0.025	0.010	mg/L		10/19/22 16:36	10/25/22 22:53	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.095		0.050	0.010	mg/L		10/19/22 16:41	10/24/22 20:14	1
Barium	0.97		0.50	0.050	mg/L		10/19/22 16:41	10/24/22 20:14	1
Beryllium	0.016		0.0040	0.0040	mg/L		10/19/22 16:41	10/24/22 20:14	1
Boron	0.20		0.10	0.050	mg/L		10/19/22 16:41	10/24/22 20:14	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/19/22 16:41	10/24/22 20:14	1
Calcium	30		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 20:14	1
Chromium	0.29		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:14	1
Cobalt	0.13		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:14	1
Iron	300		0.40	0.20	mg/L		10/19/22 16:41	10/24/22 20:14	1
Lead	0.21		0.0075	0.0075	mg/L		10/19/22 16:41	10/24/22 20:14	1
Manganese	1.7	^2	0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:14	1
Nickel	0.44		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:14	1
Potassium	49		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 20:14	1
Selenium	<0.050		0.050	0.020	mg/L		10/19/22 16:41	10/24/22 20:14	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:14	1
Zinc	0.86		0.50	0.020	mg/L		10/19/22 16:41	10/24/22 20:14	1

**Method: SW846 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		10/19/22 16:36	10/26/22 02:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/19/22 16:41	10/21/22 16:52	1
Thallium	0.0053		0.0020	0.0020	mg/L		10/19/22 16:41	10/21/22 16:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		10/19/22 14:10	10/20/22 12:53	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.045		0.020	0.0066	mg/Kg	⊛	10/19/22 13:55	10/20/22 10:00	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.3	H	1.3	0.42	mg/Kg	⊛	10/25/22 09:08	10/26/22 00:04	1
pH (SW846 9045D)	7.5		0.2	0.2	SU			10/18/22 14:54	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B13**

**Lab Sample ID: 500-223677-19**

Date Collected: 10/11/22 12:30

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 78.5

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00066	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0015	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Acetone	<0.020		0.020	0.0086	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Bromomethane	<0.0049		0.0049	0.0019	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Carbon tetrachloride	<0.0020	*+	0.0020	0.00057	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Chloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1
Xylenes, Total	<0.0040		0.0040	0.00063	mg/Kg	☼	10/12/22 18:06	10/18/22 17:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 134	10/12/22 18:06	10/18/22 17:36	1
4-Bromofluorobenzene (Surr)	86		75 - 131	10/12/22 18:06	10/18/22 17:36	1
Dibromofluoromethane	106		75 - 126	10/12/22 18:06	10/18/22 17:36	1
Toluene-d8 (Surr)	107		75 - 124	10/12/22 18:06	10/18/22 17:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B13**

**Lab Sample ID: 500-223677-19**

**Date Collected: 10/11/22 12:30**

**Matrix: Solid**

**Date Received: 10/12/22 11:11**

**Percent Solids: 78.5**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
2,4-Dinitrophenol	<0.83		0.83	0.72	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
2-Methylnaphthalene	<0.083		0.083	0.0075	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
<b>Anthracene</b>	<b>0.011</b>	<b>J</b>	0.041	0.0068	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
<b>Benzo[a]anthracene</b>	<b>0.11</b>		0.041	0.0055	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
<b>Benzo[a]pyrene</b>	<b>0.17</b>		0.041	0.0079	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
<b>Benzo[b]fluoranthene</b>	<b>0.26</b>		0.041	0.0088	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
<b>Benzo[g,h,i]perylene</b>	<b>0.060</b>		0.041	0.013	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
<b>Benzo[k]fluoranthene</b>	<b>0.089</b>		0.041	0.012	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
<b>Chrysene</b>	<b>0.14</b>		0.041	0.011	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
<b>Dibenz(a,h)anthracene</b>	<b>0.020</b>	<b>J</b>	0.041	0.0079	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
<b>Fluoranthene</b>	<b>0.24</b>		0.041	0.0076	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
<b>Hexachlorobenzene</b>	<b>0.013</b>	<b>J</b>	0.083	0.0095	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B13**

**Lab Sample ID: 500-223677-19**

Date Collected: 10/11/22 12:30

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 78.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.062</b>		0.041	0.011	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.050	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
<b>Phenanthrene</b>	<b>0.074</b>		0.041	0.0057	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
<b>Pyrene</b>	<b>0.19</b>		0.041	0.0081	mg/Kg	☼	10/20/22 07:24	10/26/22 15:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	64		31 - 143				10/20/22 07:24	10/26/22 15:33	1
2-Fluorobiphenyl	59		43 - 145				10/20/22 07:24	10/26/22 15:33	1
2-Fluorophenol	93		31 - 166				10/20/22 07:24	10/26/22 15:33	1
Nitrobenzene-d5 (Surr)	52		37 - 147				10/20/22 07:24	10/26/22 15:33	1
Phenol-d5	81		30 - 153				10/20/22 07:24	10/26/22 15:33	1
Terphenyl-d14 (Surr)	96		42 - 157				10/20/22 07:24	10/26/22 15:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.60</b>	J	1.2	0.24	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Arsenic</b>	<b>9.9</b>		0.62	0.21	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Barium</b>	<b>86</b>		0.62	0.071	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Beryllium</b>	<b>1.1</b>		0.25	0.058	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Boron</b>	<b>7.0</b>		3.1	0.29	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Cadmium</b>	<b>0.26</b>		0.12	0.022	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Calcium</b>	<b>11000</b>		12	2.1	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Chromium</b>	<b>23</b>		0.62	0.31	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Cobalt</b>	<b>15</b>		0.31	0.081	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Copper</b>	<b>24</b>		0.62	0.17	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Iron</b>	<b>24000</b>		12	6.4	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Lead</b>	<b>59</b>		0.31	0.14	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Magnesium</b>	<b>8600</b>	B	6.2	3.1	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Manganese</b>	<b>490</b>		0.62	0.090	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Nickel</b>	<b>34</b>		0.62	0.18	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Potassium</b>	<b>2600</b>		31	11	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Selenium</b>	<b>0.52</b>	J	0.62	0.36	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Silver</b>	<b>0.33</b>		0.31	0.080	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Sodium</b>	<b>2000</b>		62	9.2	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
Thallium	<0.62		0.62	0.31	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Vanadium</b>	<b>29</b>		0.31	0.073	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1
<b>Zinc</b>	<b>83</b>		1.2	0.54	mg/Kg	☼	10/18/22 16:31	10/20/22 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/19/22 16:36	10/25/22 23:03	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:36	10/26/22 12:32	1
Chromium	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 12:32	1
Iron	<0.40		0.40	0.20	mg/L		10/19/22 16:36	10/25/22 23:03	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

**Client Sample ID: 62R60-B13**

**Lab Sample ID: 500-223677-19**

Date Collected: 10/11/22 12:30

Matrix: Solid

Date Received: 10/12/22 11:11

Percent Solids: 78.5

**Method: SW846 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		10/19/22 16:36	10/25/22 23:03	1
<b>Manganese</b>	<b>0.52</b>		0.025	0.010	mg/L		10/19/22 16:36	10/26/22 12:32	1
Nickel	<0.025		0.025	0.010	mg/L		10/19/22 16:36	10/25/22 23:03	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.11</b>		0.050	0.010	mg/L		10/19/22 16:41	10/24/22 20:24	1
<b>Barium</b>	<b>1.3</b>		0.50	0.050	mg/L		10/19/22 16:41	10/24/22 20:24	1
<b>Beryllium</b>	<b>0.017</b>		0.0040	0.0040	mg/L		10/19/22 16:41	10/24/22 20:24	1
<b>Boron</b>	<b>0.23</b>		0.10	0.050	mg/L		10/19/22 16:41	10/24/22 20:24	1
<b>Cadmium</b>	<b>0.0023</b>	J	0.0050	0.0020	mg/L		10/19/22 16:41	10/24/22 20:24	1
<b>Calcium</b>	<b>43</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 20:24	1
<b>Chromium</b>	<b>0.33</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:24	1
<b>Cobalt</b>	<b>0.075</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:24	1
<b>Iron</b>	<b>320</b>		0.40	0.20	mg/L		10/19/22 16:41	10/24/22 20:24	1
<b>Lead</b>	<b>1.3</b>		0.0075	0.0075	mg/L		10/19/22 16:41	10/24/22 20:24	1
<b>Manganese</b>	<b>1.2</b>	^2	0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:24	1
<b>Nickel</b>	<b>0.40</b>		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:24	1
<b>Potassium</b>	<b>54</b>		2.5	0.50	mg/L		10/19/22 16:41	10/24/22 20:24	1
Selenium	<0.050		0.050	0.020	mg/L		10/19/22 16:41	10/24/22 20:24	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:41	10/24/22 20:24	1
<b>Zinc</b>	<b>1.1</b>		0.50	0.020	mg/L		10/19/22 16:41	10/24/22 20:24	1

**Method: SW846 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		10/19/22 16:36	10/26/22 03:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/19/22 16:41	10/21/22 17:13	1
<b>Thallium</b>	<b>0.0056</b>		0.0020	0.0020	mg/L		10/19/22 16:41	10/21/22 17:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		10/19/22 14:10	10/20/22 13:12	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.051</b>		0.019	0.0065	mg/Kg	⊛	10/19/22 13:55	10/20/22 10:10	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.2	H	1.2	0.40	mg/Kg	⊛	10/25/22 09:08	10/26/22 00:07	1
<b>pH (SW846 9045D)</b>	<b>7.7</b>		0.2	0.2	SU			10/18/22 15:02	1



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### 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.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223677-1

## Laboratory: Eurofins Chicago

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

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

## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-02-22
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23



# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	<b>Laboratory</b> Lab <b>Test America - Chicago</b> Address <b>2417 Bond Street</b> <b>University Park, IL 60484</b> Phone <b>708-534-5200</b> Contact <b>Dick Wright</b> email richard.wright@testamericainc.com	Project Name <b>AE8-003A</b> Project No <b>PTB/WO #: 195-002/003A</b> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <b>K. Moore / S. Khodaei</b>	COC No <b>2 of 2</b> Lab Job No <b>500-223677</b> Sample Temp. <b>2.4 → 2.6</b> <b>0.8 → 1.0</b>
--	---	--	---

**Special Instructions:**  
 See Table 2 for complete parameter lists and minimum reporting limits  
 \* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal  
 \*\* If SPLP result exceeds Class I Standard, run TCLP for that specific parameter  
 \*\*\* If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide

**ANALYSES**

- 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												Comments	
					VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization		
12	62R60 - B18	10/11/22	1145	S	X	X					X	X	X	X	X			
13	62R60 - B11		1150															
14	62R60 - B19		1155															
15	62R60 - B12		1205															
16	62R60 - B12 DUP		1210															
17	62R60 - B20		1220															
18	62R60 - B20 DUP		1225															
19	62R60 - B13		1230															
20	62R60 - B21	↓	1235	↓	↓	↓					↓	↓	↓	↓	↓			

Relinquished by <i>Asad Khodaei</i>	Date/Time <b>10/12/22 1010</b>	Received by <i>[Signature]</i> <b>RETA</b>	Date/Time <b>10/12/22 1010</b>
Relinquished by <i>[Signature]</i> <b>RETA</b>	Date/Time <b>10/12/22 1111</b>	Received by <i>[Signature]</i>	Date/Time <b>10/12/22 1111</b>
Relinquished by	Date/Time	Received by	Date/Time





## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223747-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/31/2022 3:49:46 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B14**

**Lab Sample ID: 500-223747-1**

**Date Collected: 10/12/22 09:25**

**Matrix: Solid**

**Date Received: 10/13/22 11:50**

**Percent Solids: 87.8**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
<b>Acetone</b>	<b>0.012</b>	<b>J</b>	0.016	0.0070	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Vinyl chloride	<0.0016	*+	0.0016	0.00072	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1
Xylenes, Total	<0.0032		0.0032	0.00052	mg/Kg	☼	10/13/22 19:28	10/19/22 20:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	10/13/22 19:28	10/19/22 20:07	1
4-Bromofluorobenzene (Surr)	85		75 - 131	10/13/22 19:28	10/19/22 20:07	1
Dibromofluoromethane	107		75 - 126	10/13/22 19:28	10/19/22 20:07	1
Toluene-d8 (Surr)	95		75 - 124	10/13/22 19:28	10/19/22 20:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B14**

**Lab Sample ID: 500-223747-1**

Date Collected: 10/12/22 09:25

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
2,4-Dinitrophenol	<0.76	F1	0.76	0.66	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
4-Nitrophenol	<0.76	F1	0.76	0.36	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
<b>Benzo[a]pyrene</b>	<b>0.013</b>	<b>J</b>	0.037	0.0073	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Bis(2-ethylhexyl) phthalate	<0.19	F1	0.19	0.069	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Butyl benzyl phthalate	<0.19	F1	0.19	0.072	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
<b>Chrysene</b>	<b>0.015</b>	<b>J</b>	0.037	0.010	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
<b>Fluoranthene</b>	<b>0.019</b>	<b>J</b>	0.037	0.0070	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Hexachlorocyclopentadiene	<0.76	F1	0.76	0.22	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1
Hexachloroethane	<0.19	F1	0.19	0.057	mg/Kg	☼	10/24/22 07:02	10/27/22 12:48	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B14**

**Lab Sample ID: 500-223747-1**

Date Collected: 10/12/22 09:25

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0097	mg/Kg	✳	10/24/22 07:02	10/27/22 12:48	1
Isophorone	<0.19		0.19	0.042	mg/Kg	✳	10/24/22 07:02	10/27/22 12:48	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	✳	10/24/22 07:02	10/27/22 12:48	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	✳	10/24/22 07:02	10/27/22 12:48	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	✳	10/24/22 07:02	10/27/22 12:48	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	✳	10/24/22 07:02	10/27/22 12:48	1
Pentachlorophenol	<0.76	F1	0.76	0.60	mg/Kg	✳	10/24/22 07:02	10/27/22 12:48	1
<b>Phenanthrene</b>	<b>0.0077</b>	<b>J</b>	0.037	0.0052	mg/Kg	✳	10/24/22 07:02	10/27/22 12:48	1
Phenol	<0.19		0.19	0.084	mg/Kg	✳	10/24/22 07:02	10/27/22 12:48	1
<b>Pyrene</b>	<b>0.021</b>	<b>J</b>	0.037	0.0075	mg/Kg	✳	10/24/22 07:02	10/27/22 12:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	76		31 - 143				10/24/22 07:02	10/27/22 12:48	1
2-Fluorobiphenyl	67		43 - 145				10/24/22 07:02	10/27/22 12:48	1
2-Fluorophenol	93		31 - 166				10/24/22 07:02	10/27/22 12:48	1
Nitrobenzene-d5 (Surr)	65		37 - 147				10/24/22 07:02	10/27/22 12:48	1
Phenol-d5	69		30 - 153				10/24/22 07:02	10/27/22 12:48	1
Terphenyl-d14 (Surr)	96		42 - 157				10/24/22 07:02	10/27/22 12:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.81</b>	<b>J F1</b>	1.1	0.21	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Arsenic</b>	<b>8.0</b>	<b>F1</b>	0.55	0.19	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Barium</b>	<b>51</b>		0.55	0.063	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Beryllium</b>	<b>1.0</b>		0.22	0.052	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Boron</b>	<b>13</b>	<b>F1</b>	2.8	0.26	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Cadmium</b>	<b>0.15</b>		0.11	0.020	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Calcium</b>	<b>43000</b>	<b>F2</b>	55	9.4	mg/Kg	✳	10/20/22 09:59	10/25/22 15:18	5
<b>Chromium</b>	<b>20</b>		0.55	0.27	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Cobalt</b>	<b>15</b>		0.28	0.072	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Copper</b>	<b>23</b>		0.55	0.15	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Iron</b>	<b>22000</b>	<b>^2</b>	11	5.7	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Lead</b>	<b>24</b>	<b>F2</b>	0.28	0.13	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Magnesium</b>	<b>18000</b>	<b>^2</b>	5.5	2.7	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Manganese</b>	<b>300</b>	<b>^2</b>	0.55	0.080	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Nickel</b>	<b>38</b>		0.55	0.16	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Potassium</b>	<b>2800</b>		28	9.8	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
Selenium	<0.55	F1	0.55	0.32	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Silver</b>	<b>0.32</b>		0.28	0.071	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Sodium</b>	<b>910</b>		55	8.2	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Thallium</b>	<b>0.36</b>	<b>J</b>	0.55	0.28	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Vanadium</b>	<b>24</b>		0.28	0.065	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1
<b>Zinc</b>	<b>58</b>		1.1	0.48	mg/Kg	✳	10/20/22 09:59	10/24/22 20:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/19/22 16:40	10/27/22 11:40	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/19/22 16:40	10/27/22 11:40	1
Chromium	<0.025		0.025	0.010	mg/L		10/19/22 16:40	10/27/22 11:40	1
<b>Iron</b>	<b>0.59</b>		0.40	0.20	mg/L		10/19/22 16:40	10/27/22 11:40	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B14**

**Lab Sample ID: 500-223747-1**

Date Collected: 10/12/22 09:25

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.011		0.0075	0.0075	mg/L		10/19/22 16:40	10/27/22 11:40	1
Manganese	4.6		0.025	0.010	mg/L		10/19/22 16:40	10/27/22 11:40	1
Nickel	0.050		0.025	0.010	mg/L		10/19/22 16:40	10/27/22 11:40	1

**Method: SW846 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		10/19/22 16:44	10/20/22 19:53	1
Barium	0.64		0.50	0.050	mg/L		10/19/22 16:44	10/20/22 19:53	1
Beryllium	0.0095		0.0040	0.0040	mg/L		10/19/22 16:44	10/20/22 19:53	1
Boron	0.22		0.10	0.050	mg/L		10/19/22 16:44	10/20/22 19:53	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/19/22 16:44	10/20/22 19:53	1
Calcium	50		2.5	0.50	mg/L		10/19/22 16:44	10/20/22 19:53	1
Chromium	0.20		0.025	0.010	mg/L		10/19/22 16:44	10/20/22 19:53	1
Cobalt	0.11		0.025	0.010	mg/L		10/19/22 16:44	10/20/22 19:53	1
Iron	190		0.40	0.20	mg/L		10/19/22 16:44	10/20/22 19:53	1
Lead	0.20		0.0075	0.0075	mg/L		10/19/22 16:44	10/20/22 19:53	1
Manganese	1.6		0.025	0.010	mg/L		10/19/22 16:44	10/20/22 19:53	1
Nickel	0.28		0.025	0.010	mg/L		10/19/22 16:44	10/20/22 19:53	1
Potassium	38	F1	2.5	0.50	mg/L		10/19/22 16:44	10/20/22 19:53	1
Selenium	<0.050	F1	0.050	0.020	mg/L		10/19/22 16:44	10/20/22 19:53	1
Silver	<0.025		0.025	0.010	mg/L		10/19/22 16:44	10/20/22 19:53	1
Zinc	0.45	J	0.50	0.020	mg/L		10/19/22 16:44	10/20/22 19:53	1

**Method: SW846 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		10/19/22 16:40	10/27/22 15:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	F1	0.0060	0.0060	mg/L		10/19/22 16:44	10/21/22 14:46	1
Thallium	0.0037		0.0020	0.0020	mg/L		10/19/22 16:44	10/21/22 14:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^1+	0.00020	0.00020	mg/L		10/22/22 12:15	10/24/22 16:45	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.055	B	0.018	0.0059	mg/Kg	☼	10/22/22 14:35	10/25/22 15:50	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.1		1.1	0.37	mg/Kg	☼	10/26/22 04:06	10/26/22 18:37	1
pH (SW846 9045D)	7.8		0.2	0.2	SU			10/18/22 16:39	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
^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.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, 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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit

Eurofins Chicago

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

## Laboratory: Eurofins Chicago

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

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

## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-01-23
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23

# CHAIN OF CUSTODY RECORD



<b>Client Contact</b>	<b>Laboratory</b>	Project Name <u>AE8-003A</u> 500-223747 COC	COC No <u>1</u> of <u>2</u>
Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	Lab <b>Test America - Chicago</b> Address <b>2417 Bond Street</b> <b>University Park, IL 60484</b> Phone <b>708-534-5200</b> Contact <b>Dick Wright</b> email richard.wright@testamericainc.com	Project No <u>PTB/WO #: 195-002/003A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other	Lab Job No <u>500-223747</u>
<b>Special Instructions:</b> 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		Sampler: <u>K. Moore / S. Khodaei</u>	

Special Instructions:					ANALYSES												Matrix Key:	
					VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization		Comments
1	62R60-B14	10/12/22	0925	S	X	X						X	X	X	X	X		
2	62R60-B22		0935															
3	62R60-B15		0940															
4	62R60-B23		0945															
5	62R60-B16		0955															
6	62R60-B24		1000															
7	62R60-B17		1005															
8	62R60-B25		1010															
9	62R60-B26		1020															
10	62R60-B28	↓	1030	↓	↓	↓						↓	↓	↓	↓	↓		
11	Trip Blank #2				X													

Relinquished by <u>S. Khodaei</u>	Date/Time <u>10/13/22</u>	Received by <u>[Signature]</u>	Date/Time <u>10/13/22 10:49</u>
Relinquished by <u>[Signature]</u>	Date/Time <u>10/13/22 10:49</u>	Received by <u>[Signature]</u>	Date/Time <u>10/13/22 1049</u>
Relinquished by <u>[Signature]</u>	Date/Time <u>10/13/22 1150</u>	Received by <u>[Signature]</u>	Date/Time <u>10/13/22 1150</u>

**Eurofins Chicago**

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

**Chain of Custody Record**



<b>Client Information (Sub Contract Lab)</b>		Sampler:		Lab PM: Wright, Richard		Carrier Tracking No(s):		COC No: 500-166504 1			
Client Contact: Shipping/Receiving		Phone:		E-Mail: Richard.Wright@et.eurofinsus.com		State of Origin: Illinois		Page: Page 1 of 2			
Company: Eurofins Environment Testing North Centr				Accreditations Required (See note): NELAP - Illinois				Job #: 500-223747-1			
Address: 3019 Venture Way,		Due Date Requested: 10/26/2022		<b>Analysis Requested</b>						<b>Preservation Codes.</b> A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify) Other:	
City: Cedar Falls		TAT Requested (days):									
State Zip: IA, 50613		PO #:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		9012B/9012B_P rep Total Cyanide		Total Number of containers	
Phone: 319-277-2401(Tel) 319-277-2425(Fax)		WO #:									
Email:		Project #: 50020681		Project Name: IDOT - AE8-003		SSOW#:		Site:		Special Instructions/Note:	
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Preservation Code:	
62R60-B14 (500-223747-1)		10/12/22		09:25 Central		Solid		X		1	
62R60-B22 (500-223747-2)		10/12/22		09:35 Central		Solid		X		1	
62R60-B15 (500-223747-3)		10/12/22		09:40 Central		Solid		X		1	
62R60-B23 (500-223747-4)		10/12/22		09:45 Central		Solid		X		1	
62R60-B16 (500-223747-5)		10/12/22		09:55 Central		Solid		X		1	
62R60-B24 (500-223747-6)		10/12/22		10:00 Central		Solid		X		1	
62R60-B17 (500-223747-7)		10/12/22		10:05 Central		Solid		X		1	
62R60-B25 (500-223747-8)		10/12/22		10:10 Central		Solid		X		1	
62R60-B26 (500-223747-9)		10/12/22		10:20 Central		Solid		X		1	
Note: Since laboratory accreditations are subject to change Eurofins Chicago places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Chicago laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Chicago attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Chicago.											
<b>Possible Hazard Identification</b>						<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>					
Unconfirmed						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Deliverable Requested I, II, III, IV, Other (specify)				Primary Deliverable Rank 1		Special Instructions/QC Requirements					
Empty Kit Relinquished by:				Date		Time		Method of Shipment:			
Relinquished by:				Date/Time: 10/24/22 1700		Company:		Received by:		Date/Time:	
Relinquished by:				Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:				Date/Time:		Company:		Received by:		Date/Time: 10/25/22 0942	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks.							

Page 162 of 165

10/31/2022





# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

6N001 Medinah Road (southeast corner of Irving Park Road and Medinah Road)

City: Unincorporated State: IL Zip Code: 60157 & 60143

County: DuPage Township: Bloomington

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

Latitude: 41.97843 Longitude: -88.05767  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

IEPA Site Number(s), if assigned: BOL: 0438995005 BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

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

Estimated Volume of debris (cu. Yd.): 96

### II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

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



Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATION 62R60-B42 WAS SAMPLED ADJACENT TO SITE 4386-54. SEE TABLE 3q AND FIGURE 9 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORT- EUROFINS JOB ID NUMBER: 500-223747-1.

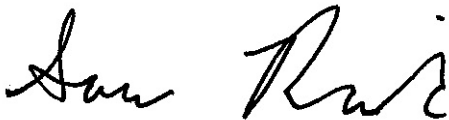
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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

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

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

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:





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

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

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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**

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

ISGS Site 4386-54  
Medinah Country Club

Sample ID	62R60-B42	Maximum Allowable Concentration					
Sample Depth (ft)	0-2	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area	
Sample Date	10/12/2022						
PID	0						
Sample pH	7.7						
Matrix	Soil						
Semivolatile Organic Compounds (mg/kg)							
Benzo(a)pyrene	0.27	1,2	0.09	0.09	0.98	11.4	2.1

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223747-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/31/2022 3:49:46 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B42**

**Lab Sample ID: 500-223747-17**

Date Collected: 10/12/22 12:20

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 83.0

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00084	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
1,1-Dichloroethane	<0.0019		0.0019	0.00067	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
1,1-Dichloroethene	<0.0019		0.0019	0.00067	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00068	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0014	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Acetone	<0.019	*1	0.019	0.0085	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Benzene	<0.0019		0.0019	0.00050	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Bromodichloromethane	<0.0019		0.0019	0.00040	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Bromoform	<0.0019		0.0019	0.00057	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Bromomethane	<0.0049		0.0049	0.0018	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Carbon tetrachloride	<0.0019		0.0019	0.00057	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Chlorobenzene	<0.0019		0.0019	0.00072	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Chloroethane	<0.0049		0.0049	0.0014	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Chloroform	<0.0019		0.0019	0.00068	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00059	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Dibromochloromethane	<0.0019		0.0019	0.00064	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Ethylbenzene	<0.0019		0.0019	0.00093	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00057	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Styrene	<0.0019		0.0019	0.00059	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Tetrachloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Toluene	<0.0019		0.0019	0.00049	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00086	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00068	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Trichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Vinyl chloride	<0.0019		0.0019	0.00086	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1
Xylenes, Total	<0.0039		0.0039	0.00062	mg/Kg	☼	10/13/22 19:28	10/20/22 18:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 134	10/13/22 19:28	10/20/22 18:13	1
4-Bromofluorobenzene (Surr)	86		75 - 131	10/13/22 19:28	10/20/22 18:13	1
Dibromofluoromethane	108		75 - 126	10/13/22 19:28	10/20/22 18:13	1
Toluene-d8 (Surr)	103		75 - 124	10/13/22 19:28	10/20/22 18:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B42**

**Lab Sample ID: 500-223747-17**

**Date Collected: 10/12/22 12:20**

**Matrix: Solid**

**Date Received: 10/13/22 11:50**

**Percent Solids: 83.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
2,4-Dinitrophenol	<0.81		0.81	0.70	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
3,3'-Dichlorobenzidine	<0.20	*3	0.20	0.056	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
<b>Acenaphthene</b>	<b>0.021</b>	<b>J</b>	0.040	0.0072	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
<b>Anthracene</b>	<b>0.043</b>		0.040	0.0067	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
<b>Benzo[a]anthracene</b>	<b>0.16</b>	<b>*3</b>	0.040	0.0054	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
<b>Benzo[a]pyrene</b>	<b>0.27</b>	<b>*3</b>	0.040	0.0077	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
<b>Benzo[b]fluoranthene</b>	<b>0.30</b>	<b>*3</b>	0.040	0.0086	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
<b>Benzo[g,h,i]perylene</b>	<b>0.17</b>	<b>*3</b>	0.040	0.013	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
<b>Benzo[k]fluoranthene</b>	<b>0.15</b>	<b>*3</b>	0.040	0.012	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Bis(2-ethylhexyl) phthalate	<0.20	*3	0.20	0.073	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Butyl benzyl phthalate	<0.20	*3	0.20	0.076	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
<b>Chrysene</b>	<b>0.20</b>	<b>*3</b>	0.040	0.011	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
<b>Dibenz(a,h)anthracene</b>	<b>0.057</b>	<b>*3</b>	0.040	0.0077	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
<b>Fluoranthene</b>	<b>0.28</b>		0.040	0.0074	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
<b>Fluorene</b>	<b>0.017</b>	<b>J</b>	0.040	0.0056	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1

Euofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B42**

**Lab Sample ID: 500-223747-17**

Date Collected: 10/12/22 12:20

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.14</b>	<b>*3</b>	0.040	0.010	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
<b>Phenanthrene</b>	<b>0.20</b>		0.040	0.0056	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
<b>Pyrene</b>	<b>0.66</b>	<b>*3</b>	0.040	0.0079	mg/Kg	☼	10/24/22 07:02	10/27/22 19:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	103		31 - 143				10/24/22 07:02	10/27/22 19:20	1
2-Fluorobiphenyl	102		43 - 145				10/24/22 07:02	10/27/22 19:20	1
2-Fluorophenol	115		31 - 166				10/24/22 07:02	10/27/22 19:20	1
Nitrobenzene-d5 (Surr)	77		37 - 147				10/24/22 07:02	10/27/22 19:20	1
Phenol-d5	123		30 - 153				10/24/22 07:02	10/27/22 19:20	1
Terphenyl-d14 (Surr)	254	S1+ *3	42 - 157				10/24/22 07:02	10/27/22 19:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.75</b>	<b>J</b>	1.2	0.23	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Arsenic</b>	<b>10</b>		0.58	0.20	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Barium</b>	<b>89</b>		0.58	0.066	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Beryllium</b>	<b>0.95</b>		0.23	0.054	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Boron</b>	<b>6.3</b>		2.9	0.27	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Cadmium</b>	<b>0.16</b>		0.12	0.021	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Calcium</b>	<b>5500</b>		12	2.0	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Chromium</b>	<b>18</b>		0.58	0.29	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Cobalt</b>	<b>14</b>		0.29	0.076	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Copper</b>	<b>27</b>		0.58	0.16	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Iron</b>	<b>22000</b>		12	6.0	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Lead</b>	<b>39</b>		0.29	0.13	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Magnesium</b>	<b>3900</b>	<b>^2</b>	5.8	2.9	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Manganese</b>	<b>480</b>	<b>^2</b>	0.58	0.084	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Nickel</b>	<b>25</b>		0.58	0.17	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Potassium</b>	<b>1700</b>		29	10	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Selenium</b>	<b>0.58</b>		0.58	0.34	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Silver</b>	<b>0.32</b>		0.29	0.075	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Sodium</b>	<b>440</b>		58	8.6	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Thallium</b>	<b>0.51</b>	<b>J</b>	0.58	0.29	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Vanadium</b>	<b>28</b>		0.29	0.068	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1
<b>Zinc</b>	<b>73</b>		1.2	0.51	mg/Kg	☼	10/20/22 09:59	10/24/22 22:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/21/22 22:40	10/25/22 21:30	1
<b>Iron</b>	<b>0.48</b>		0.40	0.20	mg/L		10/21/22 22:40	10/25/22 21:30	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/21/22 22:40	10/25/22 21:30	1
<b>Manganese</b>	<b>0.34</b>		0.025	0.010	mg/L		10/21/22 22:40	10/25/22 21:30	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B42**

**Lab Sample ID: 500-223747-17**

Date Collected: 10/12/22 12:20

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<0.025		0.025	0.010	mg/L		10/21/22 22:40	10/25/22 21:30	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.039	J	0.050	0.010	mg/L		10/21/22 22:43	10/24/22 23:19	1
Barium	0.47	J	0.50	0.050	mg/L		10/21/22 22:43	10/24/22 23:19	1
Beryllium	0.0051		0.0040	0.0040	mg/L		10/21/22 22:43	10/24/22 23:19	1
Boron	0.10	B	0.10	0.050	mg/L		10/21/22 22:43	10/24/22 23:19	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/21/22 22:43	10/24/22 23:19	1
Calcium	22		2.5	0.50	mg/L		10/21/22 22:43	10/24/22 23:19	1
Chromium	0.10		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 23:19	1
Cobalt	0.021	J	0.025	0.010	mg/L		10/21/22 22:43	10/24/22 23:19	1
Iron	110	B	0.40	0.20	mg/L		10/21/22 22:43	10/24/22 23:19	1
Lead	0.059		0.0075	0.0075	mg/L		10/21/22 22:43	10/24/22 23:19	1
Manganese	0.42	^2	0.025	0.010	mg/L		10/21/22 22:43	10/24/22 23:19	1
Nickel	0.12		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 23:19	1
Potassium	15		2.5	0.50	mg/L		10/21/22 22:43	10/24/22 23:19	1
Selenium	<0.050		0.050	0.020	mg/L		10/21/22 22:43	10/24/22 23:19	1
Silver	<0.025		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 23:19	1
Zinc	0.31	J	0.50	0.020	mg/L		10/21/22 22:43	10/24/22 23:19	1

**Method: SW846 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		10/21/22 22:40	10/27/22 01:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/21/22 22:43	10/27/22 00:01	1
Thallium	0.0034		0.0020	0.0020	mg/L		10/21/22 22:43	10/27/22 00:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/22/22 12:15	10/25/22 12:28	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.085	B	0.018	0.0061	mg/Kg	☆	10/22/22 14:35	10/25/22 16:32	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.2		1.2	0.38	mg/Kg	☆	10/26/22 04:06	10/26/22 18:35	1
pH (SW846 9045D)	7.7		0.2	0.2	SU			10/18/22 17:13	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
^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.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, 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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

## Laboratory: Eurofins Chicago

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

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

## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-01-23
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23



# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	<b>Laboratory</b> Lab <u>Test America - Chicago</u> Address <u>2417 Bond Street</u> <u>University Park, IL 60484</u> Phone <u>708-534-5200</u> Contact <u>Dick Wright</u> email <u>richard.wright@testamericainc.com</u>	Project Name <u>AC8-003A</u> Project No <u>PTB/WO #: 195-002/003A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>K. Moore / S. Khodaei</u>	COC No <u>2</u> of <u>2</u> Lab Job No <u>500-223749</u> Sample Temp
--	--	--	--

**Special Instructions:**  
See Table 2 for complete parameter lists and minimum reporting limits  
\* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal  
\*\* If SPLP result exceeds Class I Standard, run TCLP for that specific parameter  
\*\*\* If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide

ANALYSES														
VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization			

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
12	62R60-B27	10/12/22	1040	S	X	X					X	X	X	X	X					
13	62R60-B29		1130																	
14	62R60-B40		1135																	
15	62R60-B30		1150																	
16	62R60-B41		1205																	
17	62R60-B42		1220																	
18	62R60-B31		1235																	
19	Tip Blot			W	X															

Relinquished by <u>Paul Khodaei</u>	Date/Time <u>10/13/22</u>	Received by <u>Paul Khodaei</u>	Date/Time <u>10/13/22 10:49</u>
Relinquished by <u>Paul Khodaei</u>	Date/Time <u>10/13/22 10:49</u>	Received by <u>Paul Khodaei</u>	Date/Time <u>10/13/27 10:49</u>
Relinquished by <u>Paul Khodaei</u>	Date/Time <u>10/13/22 1150</u>	Received by <u>Paul Khodaei</u>	Date/Time <u>10/13/22 1150</u>







# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

21W750 Irving Park Road (northeast corner of Irving Park Road and Medinah Road)

City: Unincorporated State: IL Zip Code: 60143

County: DuPage Township: Bloomington

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

Latitude: 41.97718 Longitude: -88.05133  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

IEPA Site Number(s), if assigned: BOL: 0438995002 BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

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

Estimated Volume of debris (cu. Yd.): 1

### II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

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



Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATION 62R60-B27 WAS SAMPLED ADJACENT TO SITE 4386-56. SEE TABLE 3r AND FIGURE 8 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORT- EUROFINS JOB ID NUMBER: 500-223747-1.

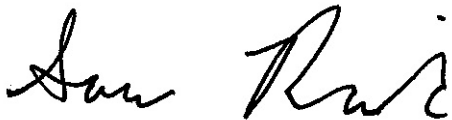
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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

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

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

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



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

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

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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**

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

ISGS Site 4386-56  
 Medinah Muffler &  
 Brakes

Sample ID	62R60-B27	Maximum Allowable Concentration					
Sample Depth (ft)	0-5			<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area	
Sample Date	10/12/2022	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area				
PID	0						
Sample pH	7.6						
Matrix	Soil						
Semivolatile Organic Compounds (mg/kg)							
Benzo(a)pyrene	0.097	1,2	0.09	0.09	0.98	11.4	2.1

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223747-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/31/2022 3:49:46 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B27**

**Lab Sample ID: 500-223747-12**

**Date Collected: 10/12/22 10:40**

**Matrix: Solid**

**Date Received: 10/13/22 11:50**

**Percent Solids: 84.2**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Acetone	<0.018	*1	0.018	0.0077	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☼	10/13/22 19:28	10/20/22 16:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 134	10/13/22 19:28	10/20/22 16:16	1
4-Bromofluorobenzene (Surr)	85		75 - 131	10/13/22 19:28	10/20/22 16:16	1
Dibromofluoromethane	108		75 - 126	10/13/22 19:28	10/20/22 16:16	1
Toluene-d8 (Surr)	103		75 - 124	10/13/22 19:28	10/20/22 16:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B27**

**Lab Sample ID: 500-223747-12**

**Date Collected: 10/12/22 10:40**

**Matrix: Solid**

**Date Received: 10/13/22 11:50**

**Percent Solids: 84.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
2,4-Dinitrophenol	<0.77		0.77	0.68	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
2-Methylnaphthalene	<0.077		0.077	0.0071	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
3,3'-Dichlorobenzidine	<0.19	*3	0.19	0.054	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
4-Nitrophenol	<0.77		0.77	0.37	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
<b>Anthracene</b>	<b>0.016</b>	<b>J</b>	0.038	0.0064	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
<b>Benzo[a]anthracene</b>	<b>0.10</b>	<b>*3</b>	0.038	0.0052	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
<b>Benzo[a]pyrene</b>	<b>0.097</b>	<b>*3</b>	0.038	0.0074	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
<b>Benzo[b]fluoranthene</b>	<b>0.14</b>	<b>*3</b>	0.038	0.0083	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
<b>Benzo[g,h,i]perylene</b>	<b>0.072</b>	<b>*3</b>	0.038	0.012	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
<b>Benzo[k]fluoranthene</b>	<b>0.10</b>	<b>*3</b>	0.038	0.011	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Bis(2-ethylhexyl) phthalate	<0.19	*3	0.19	0.070	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Butyl benzyl phthalate	<0.19	*3	0.19	0.073	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
<b>Chrysene</b>	<b>0.11</b>	<b>*3</b>	0.038	0.010	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
<b>Dibenz(a,h)anthracene</b>	<b>0.039</b>	<b>*3</b>	0.038	0.0074	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
<b>Fluoranthene</b>	<b>0.16</b>		0.038	0.0071	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	10/24/22 07:02	10/27/22 17:24	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B27**

**Lab Sample ID: 500-223747-12**

Date Collected: 10/12/22 10:40

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.069</b>	<b>*3</b>	0.038	0.010	mg/Kg	✳	10/24/22 07:02	10/27/22 17:24	1
Isophorone	<0.19		0.19	0.043	mg/Kg	✳	10/24/22 07:02	10/27/22 17:24	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	✳	10/24/22 07:02	10/27/22 17:24	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	✳	10/24/22 07:02	10/27/22 17:24	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	✳	10/24/22 07:02	10/27/22 17:24	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	✳	10/24/22 07:02	10/27/22 17:24	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	✳	10/24/22 07:02	10/27/22 17:24	1
<b>Phenanthrene</b>	<b>0.063</b>		0.038	0.0054	mg/Kg	✳	10/24/22 07:02	10/27/22 17:24	1
Phenol	<0.19		0.19	0.085	mg/Kg	✳	10/24/22 07:02	10/27/22 17:24	1
<b>Pyrene</b>	<b>0.29</b>	<b>*3</b>	0.038	0.0076	mg/Kg	✳	10/24/22 07:02	10/27/22 17:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	78		31 - 143				10/24/22 07:02	10/27/22 17:24	1
2-Fluorobiphenyl	60		43 - 145				10/24/22 07:02	10/27/22 17:24	1
2-Fluorophenol	103		31 - 166				10/24/22 07:02	10/27/22 17:24	1
Nitrobenzene-d5 (Surr)	66		37 - 147				10/24/22 07:02	10/27/22 17:24	1
Phenol-d5	63		30 - 153				10/24/22 07:02	10/27/22 17:24	1
Terphenyl-d14 (Surr)	200	S1+ *3	42 - 157				10/24/22 07:02	10/27/22 17:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.44</b>	<b>J</b>	1.1	0.21	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Arsenic</b>	<b>9.5</b>		0.55	0.19	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Barium</b>	<b>73</b>		0.55	0.063	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Beryllium</b>	<b>0.77</b>		0.22	0.052	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Boron</b>	<b>6.7</b>		2.8	0.26	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Cadmium</b>	<b>0.20</b>		0.11	0.020	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Calcium</b>	<b>35000</b>		55	9.4	mg/Kg	✳	10/20/22 09:59	10/25/22 16:15	5
<b>Chromium</b>	<b>14</b>		0.55	0.27	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Cobalt</b>	<b>11</b>		0.28	0.072	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Copper</b>	<b>23</b>		0.55	0.15	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Iron</b>	<b>19000</b>	<b>^2</b>	11	5.7	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Lead</b>	<b>45</b>		0.28	0.13	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Magnesium</b>	<b>18000</b>	<b>^2</b>	5.5	2.7	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Manganese</b>	<b>370</b>	<b>^2</b>	0.55	0.080	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Nickel</b>	<b>27</b>		0.55	0.16	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Potassium</b>	<b>1600</b>		28	9.8	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
Selenium	<0.55		0.55	0.32	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Silver</b>	<b>0.32</b>		0.28	0.071	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Sodium</b>	<b>140</b>		55	8.2	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
Thallium	<0.55		0.55	0.28	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Vanadium</b>	<b>24</b>		0.28	0.065	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1
<b>Zinc</b>	<b>70</b>		1.1	0.48	mg/Kg	✳	10/20/22 09:59	10/24/22 21:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/21/22 22:40	10/25/22 21:13	1
<b>Iron</b>	<b>0.45</b>		0.40	0.20	mg/L		10/21/22 22:40	10/25/22 21:13	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/21/22 22:40	10/25/22 21:13	1
<b>Manganese</b>	<b>1.3</b>		0.025	0.010	mg/L		10/21/22 22:40	10/25/22 21:13	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B27**

**Lab Sample ID: 500-223747-12**

Date Collected: 10/12/22 10:40

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 84.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	0.011	J	0.025	0.010	mg/L		10/21/22 22:40	10/25/22 21:13	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.042	J	0.050	0.010	mg/L		10/21/22 22:43	10/24/22 22:56	1
Barium	0.50		0.50	0.050	mg/L		10/21/22 22:43	10/24/22 22:56	1
Beryllium	0.0051		0.0040	0.0040	mg/L		10/21/22 22:43	10/24/22 22:56	1
Boron	0.088	J B	0.10	0.050	mg/L		10/21/22 22:43	10/24/22 22:56	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/21/22 22:43	10/24/22 22:56	1
Calcium	28		2.5	0.50	mg/L		10/21/22 22:43	10/24/22 22:56	1
Chromium	0.099		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 22:56	1
Cobalt	0.023	J	0.025	0.010	mg/L		10/21/22 22:43	10/24/22 22:56	1
Iron	110	B	0.40	0.20	mg/L		10/21/22 22:43	10/24/22 22:56	1
Lead	0.13		0.0075	0.0075	mg/L		10/21/22 22:43	10/24/22 22:56	1
Manganese	0.50	^2	0.025	0.010	mg/L		10/21/22 22:43	10/24/22 22:56	1
Nickel	0.11		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 22:56	1
Potassium	14		2.5	0.50	mg/L		10/21/22 22:43	10/24/22 22:56	1
Selenium	<0.050		0.050	0.020	mg/L		10/21/22 22:43	10/24/22 22:56	1
Silver	<0.025		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 22:56	1
Zinc	0.39	J	0.50	0.020	mg/L		10/21/22 22:43	10/24/22 22:56	1

**Method: SW846 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		10/21/22 22:40	10/27/22 00:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/21/22 22:43	10/26/22 23:44	1
Thallium	0.0027		0.0020	0.0020	mg/L		10/21/22 22:43	10/26/22 23:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^1+	0.00020	0.00020	mg/L		10/22/22 12:15	10/24/22 17:29	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.069	B	0.018	0.0062	mg/Kg	☆	10/22/22 14:35	10/25/22 16:19	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.1		1.1	0.37	mg/Kg	☆	10/26/22 04:06	10/26/22 18:25	1
pH (SW846 9045D)	7.6		0.2	0.2	SU			10/18/22 17:03	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
^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.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, 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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

## Laboratory: Eurofins Chicago

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

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

## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-01-23
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23



# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	<b>Laboratory</b> Lab <u>Test America - Chicago</u> Address <u>2417 Bond Street</u> <u>University Park, IL 60484</u> Phone <u>708-534-5200</u> Contact <u>Dick Wright</u> email <u>richard.wright@testamericainc.com</u>	Project Name <u>AC8-003A</u> Project No <u>PTB/WO #: 195-002/003A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>K. Moore / S. Khodaei</u>	COC No <u>2</u> of <u>2</u> Lab Job No <u>500-223749</u> Sample Temp
--	--	--	--

**Special Instructions:**  
See Table 2 for complete parameter lists and minimum reporting limits  
\* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal  
\*\* If SPLP result exceeds Class I Standard, run TCLP for that specific parameter  
\*\*\* If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide

ANALYSES														
VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization			

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
12	62R60-B27	10/12/22	1040	S	X	X					X	X	X	X	X					
13	62R60-B29		1130																	
14	62R60-B40		1135																	
15	62R60-B30		1150																	
16	62R60-B41		1205																	
17	62R60-B42		1220																	
18	62R60-B31		1235																	
19	Tip Blot			W	X															

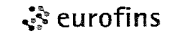
Relinquished by <u>Paul Khodaei</u>	Date/Time <u>10/13/22</u>	Received by <u>Paul Khodaei</u>	Date/Time <u>10/13/22 10:49</u>
Relinquished by <u>Paul Khodaei</u>	Date/Time <u>10/13/22 10:49</u>	Received by <u>Paul Khodaei</u>	Date/Time <u>10/13/27 10:49</u>
Relinquished by <u>Paul Khodaei</u>	Date/Time <u>10/13/22 1150</u>	Received by <u>Paul Khodaei</u>	Date/Time <u>10/13/22 1150</u>



**Eurofins Chicago**

2417 Bond Street  
 University Park, IL 60484  
 Phone 708-534-5200 Fax. 708-534-5211

**Chain of Custody Record**



Environment Testing  
 America

<b>Client Information (Sub Contract Lab)</b>	Sampler	Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact:	Phone:	E-Mail:	State of Origin.	Page
Shipping/Receiving		Richard Wright@et.eurofinsus.com	Illinois	Page 2 of 2

Company	Accreditations Required (See note):	Job #:
Eurofins Environment Testing North Centr	NELAP - Illinois	500-223747-1

Address:	Due Date Requested	<b>Analysis Requested</b>										<b>Preservation Codes:</b>	
3019 Venture Way,	10/26/2022											A - HCL M - Hexane	
City	TAT Requested (days):											B - NaOH N - None	
Cedar Falls												C - Zn Acetate O - AsNaO2	
State, Zip:												D - Nitric Acid P - Na2O4S	
IA, 50613												E - NaHSO4 Q - Na2SO3	
Phone:	PO #:											F - MeOH R - Na2S2O3	
319-277-2401(Tel) 319-277-2425(Fax)												G - Amchlor S - H2SO4	
Email:	WO #:											H - Ascorbic Acid T - TSP Dodecahydrate	
												I - Ice U - Acetone	
Project Name:	Project #:											J - DI Water V - MCAA	
IDOT - AE8-003	50020681											K - EDTA W - pH 4-5	
Site:	SSOW#:											L - EDA Y - Trizma	
												Z - other (specify)	
												Other	

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B/9012B_Prep Total Cyanide											Total Number of containers	Special Instructions/Note
								Preservation Code:											
62R60-B28 (500-223747-10)	10/12/22	10 30 Central		Solid		X												1	
62R60-B27 (500-223747-12)	10/12/22	10 40 Central		Solid		X												1	
62R60-B29 (500-223747-13)	10/12/22	11 30 Central		Solid		X												1	
62R60-B40 (500-223747-14)	10/12/22	11 35 Central		Solid		X												1	
62R60-B30 (500-223747-15)	10/12/22	11 50 Central		Solid		X												1	
62R60-B41 (500-223747-16)	10/12/22	12 05 Central		Solid		X												1	
62R60-B42 (500-223747-17)	10/12/22	12 20 Central		Solid		X												1	
62R60-B31 (500-223747-18)	10/12/22	12 35 Central		Solid		X												1	

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

<b>Possible Hazard Identification</b>	<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>
Unconfirmed	<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months
Deliverable Requested I, II, III, IV, Other (specify)	Special Instructions/QC Requirements
Primary Deliverable Rank 1	

Empty Kit Relinquished by:	Date	Time	Method of Shipment:
Relinquished by: <i>[Signature]</i>	Date/Time: 10/24/22 17:00	Company:	Received by:
Relinquished by:	Date/Time:	Company:	Received by:
Relinquished by:	Date/Time:	Company:	Received by: <i>[Signature]</i>
			Date/Time: 10/31/22 0945

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.
--	-----------------	---

Page 163 of 165

10/31/2022







# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

21W710 Irving Park Road (northwest corner of Irving Park Road and Meacham Creek)

City: Unincorporated State: IL Zip Code: 60143

County: DuPage Township: Bloomington

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

Latitude: 41.97648 Longitude: -88.04885

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

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

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

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

### II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATION 62R60-B52 WAS SAMPLED ADJACENT TO SITE 4386-58. SEE TABLE 3s AND FIGURE 8 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORT- EUROFINS JOB ID NUMBER: 500-249272-1.

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

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

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

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

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



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

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

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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**

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

ISGS Site 4386-58

Shri Swaminarayan Temple

Sample ID	62R60-B52	<b>Maximum Allowable Concentration</b>				
Sample Depth (ft)	0-2	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area
Sample Date	4/19/2024					
PID	0					
Sample pH	7.9					
Matrix	Soil					
<b>No Contaminants of Concern Noted.</b>						



# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 5/3/2024 4:40:30 PM

## JOB DESCRIPTION

IDOT - AE8-003A

## JOB NUMBER

500-249272-1



# Eurofins Chicago

## Job Notes

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

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

## Authorization



Generated  
5/3/2024 4:40:30 PM

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003A

Job ID: 500-249272-1

**Client Sample ID: 62R60-B52**

**Lab Sample ID: 500-249272-3**

**Date Collected: 04/19/24 13:30**

**Matrix: Solid**

**Date Received: 04/19/24 15:55**

**Percent Solids: 81.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00053	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00050	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00067	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
1,1-Dichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
1,1-Dichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00055	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0012	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Acetone	<0.016		0.016	0.0068	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Benzene	<0.0016		0.0016	0.00040	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Bromodichloromethane	<0.0016		0.0016	0.00032	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Bromoform	<0.0016		0.0016	0.00046	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Carbon disulfide	<0.0039		0.0039	0.00082	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Chlorobenzene	<0.0016		0.0016	0.00058	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Chloroethane	<0.0039		0.0039	0.0012	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Chloroform	<0.0016		0.0016	0.00054	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Chloromethane	<0.0039		0.0039	0.0016	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00044	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00047	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Dibromochloromethane	<0.0016		0.0016	0.00051	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Ethylbenzene	<0.0016		0.0016	0.00075	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00046	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Styrene	<0.0016		0.0016	0.00047	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Tetrachloroethene	<0.0016		0.0016	0.00053	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00070	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00055	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Trichloroethene	<0.0016		0.0016	0.00053	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Vinyl chloride	<0.0016		0.0016	0.00069	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1
Xylenes, Total	<0.0031		0.0031	0.00050	mg/Kg	☆	04/19/24 17:35	04/27/24 14:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	140	S1+	70 - 134	04/19/24 17:35	04/27/24 14:59	1
4-Bromofluorobenzene (Surr)	118		75 - 131	04/19/24 17:35	04/27/24 14:59	1
Dibromofluoromethane	113		75 - 126	04/19/24 17:35	04/27/24 14:59	1
Toluene-d8 (Surr)	103		75 - 124	04/19/24 17:35	04/27/24 14:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.028	mg/Kg	☆	04/26/24 14:41	04/29/24 20:23	1
1,2-Dichlorobenzene	<0.20		0.20	0.016	mg/Kg	☆	04/26/24 14:41	04/29/24 20:23	1
1,3-Dichlorobenzene	<0.20		0.20	0.018	mg/Kg	☆	04/26/24 14:41	04/29/24 20:23	1
1,4-Dichlorobenzene	<0.20		0.20	0.018	mg/Kg	☆	04/26/24 14:41	04/29/24 20:23	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.028	mg/Kg	☆	04/26/24 14:41	04/29/24 20:23	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003A

Job ID: 500-249272-1

**Client Sample ID: 62R60-B52**

**Lab Sample ID: 500-249272-3**

**Date Collected: 04/19/24 13:30**

**Matrix: Solid**

**Date Received: 04/19/24 15:55**

**Percent Solids: 81.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.015	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
2,4,6-Trichlorophenol	<0.39		0.39	0.013	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
2,4-Dichlorophenol	<0.39		0.39	0.014	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
2,4-Dimethylphenol	<0.39		0.39	0.087	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
2,4-Dinitrophenol	<0.79		0.79	0.23	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
2,4-Dinitrotoluene	<0.20		0.20	0.022	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
2,6-Dinitrotoluene	<0.20		0.20	0.013	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
2-Chloronaphthalene	<0.20		0.20	0.015	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
2-Chlorophenol	<0.20		0.20	0.013	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
2-Methylnaphthalene	<0.079		0.079	0.0078	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
2-Methylphenol	<0.20		0.20	0.021	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
2-Nitroaniline	<0.20		0.20	0.021	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
2-Nitrophenol	<0.39		0.39	0.026	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
3 & 4 Methylphenol	<0.20		0.20	0.029	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.032	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
3-Nitroaniline	<0.39		0.39	0.018	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.22	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.027	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
4-Chloro-3-methylphenol	<0.39		0.39	0.015	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
4-Chloroaniline	<0.79		0.79	0.41	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
4-Nitroaniline	<0.39		0.39	0.029	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
4-Nitrophenol	<0.79		0.79	0.14	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Acenaphthene	<0.039		0.039	0.0079	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Acenaphthylene	<0.039		0.039	0.0066	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Anthracene	<0.039		0.039	0.0080	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
<b>Benzo[a]anthracene</b>	<b>0.051</b>		0.039	0.0083	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
<b>Benzo[a]pyrene</b>	<b>0.064</b>		0.039	0.038	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
<b>Benzo[b]fluoranthene</b>	<b>0.098</b>		0.039	0.037	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
<b>Benzo[g,h,i]perylene</b>	<b>0.058</b>		0.039	0.0084	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
<b>Benzo[k]fluoranthene</b>	<b>0.036 J</b>		0.039	0.015	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.015	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.018	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.15	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Butyl benzyl phthalate	<0.20		0.20	0.019	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Carbazole	<0.20		0.20	0.015	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
<b>Chrysene</b>	<b>0.067</b>		0.039	0.010	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Dibenz(a,h)anthracene	<0.039		0.039	0.039	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Dibenzofuran	<0.20		0.20	0.014	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Diethyl phthalate	<0.20		0.20	0.018	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Dimethyl phthalate	<0.20		0.20	0.0085	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Di-n-butyl phthalate	<0.20		0.20	0.012	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Di-n-octyl phthalate	<0.39		0.39	0.27	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
<b>Fluoranthene</b>	<b>0.11</b>		0.039	0.0091	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Fluorene	<0.039		0.039	0.012	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Hexachlorobenzene	<0.079		0.079	0.0075	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Hexachlorobutadiene	<0.20		0.20	0.022	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Hexachlorocyclopentadiene	<0.79		0.79	0.41	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1
Hexachloroethane	<0.20		0.20	0.019	mg/Kg	☼	04/26/24 14:41	04/29/24 20:23	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003A

Job ID: 500-249272-1

**Client Sample ID: 62R60-B52**

**Lab Sample ID: 500-249272-3**

Date Collected: 04/19/24 13:30

Matrix: Solid

Date Received: 04/19/24 15:55

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.045</b>		0.039	0.038	mg/Kg	✳	04/26/24 14:41	04/29/24 20:23	1
Isophorone	<0.20		0.20	0.020	mg/Kg	✳	04/26/24 14:41	04/29/24 20:23	1
Naphthalene	<0.039		0.039	0.0070	mg/Kg	✳	04/26/24 14:41	04/29/24 20:23	1
Nitrobenzene	<0.039		0.039	0.012	mg/Kg	✳	04/26/24 14:41	04/29/24 20:23	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.0077	mg/Kg	✳	04/26/24 14:41	04/29/24 20:23	1
N-Nitrosodiphenylamine	<0.20		0.20	0.023	mg/Kg	✳	04/26/24 14:41	04/29/24 20:23	1
Pentachlorophenol	<0.79		0.79	0.097	mg/Kg	✳	04/26/24 14:41	04/29/24 20:23	1
<b>Phenanthrene</b>	<b>0.032</b>	<b>J</b>	0.039	0.0085	mg/Kg	✳	04/26/24 14:41	04/29/24 20:23	1
Phenol	<0.20		0.20	0.017	mg/Kg	✳	04/26/24 14:41	04/29/24 20:23	1
<b>Pyrene</b>	<b>0.092</b>		0.039	0.011	mg/Kg	✳	04/26/24 14:41	04/29/24 20:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	74		31 - 143	04/26/24 14:41	04/29/24 20:23	1
2-Fluorobiphenyl	71		43 - 145	04/26/24 14:41	04/29/24 20:23	1
2-Fluorophenol	60		31 - 166	04/26/24 14:41	04/29/24 20:23	1
Nitrobenzene-d5 (Surr)	64		37 - 147	04/26/24 14:41	04/29/24 20:23	1
Phenol-d5	66		30 - 153	04/26/24 14:41	04/29/24 20:23	1
Terphenyl-d14 (Surr)	80		42 - 157	04/26/24 14:41	04/29/24 20:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.44</b>	<b>J</b>	2.2	0.43	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Arsenic</b>	<b>10</b>		1.1	0.38	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Barium</b>	<b>82</b>		1.1	0.13	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Beryllium</b>	<b>0.66</b>		0.44	0.10	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Boron</b>	<b>12</b>	<b>J B</b>	27	2.6	mg/Kg	✳	04/23/24 16:56	04/25/24 14:23	5
<b>Cadmium</b>	<b>0.30</b>	<b>B</b>	0.22	0.040	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Calcium</b>	<b>11000</b>	<b>B</b>	22	3.7	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Chromium</b>	<b>16</b>		1.1	0.54	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Cobalt</b>	<b>11</b>		0.55	0.14	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Copper</b>	<b>29</b>		1.1	0.31	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Iron</b>	<b>21000</b>		22	11	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Lead</b>	<b>33</b>		0.55	0.25	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Magnesium</b>	<b>7200</b>		11	5.4	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Manganese</b>	<b>510</b>	<b>B</b>	1.1	0.16	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Nickel</b>	<b>30</b>		5.5	1.6	mg/Kg	✳	04/23/24 16:56	04/25/24 14:23	5
<b>Potassium</b>	<b>2300</b>		270	97	mg/Kg	✳	04/23/24 16:56	04/25/24 14:23	5
Selenium	<1.1		1.1	0.65	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Silver</b>	<b>0.24</b>	<b>J</b>	0.55	0.14	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Sodium</b>	<b>180</b>	<b>B</b>	110	16	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
Thallium	<1.1		1.1	0.55	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Vanadium</b>	<b>28</b>		0.55	0.13	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1
<b>Zinc</b>	<b>87</b>		2.2	0.96	mg/Kg	✳	04/23/24 16:56	04/24/24 13:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>0.95</b>		0.40	0.20	mg/L		05/02/24 16:22	05/03/24 12:13	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/02/24 16:22	05/03/24 12:13	1
<b>Manganese</b>	<b>0.59</b>		0.025	0.010	mg/L		05/02/24 16:22	05/03/24 12:13	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003A

Job ID: 500-249272-1

**Client Sample ID: 62R60-B52**

**Lab Sample ID: 500-249272-3**

Date Collected: 04/19/24 13:30

Matrix: Solid

Date Received: 04/19/24 15:55

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		04/29/24 08:50	04/30/24 01:16	1
<b>Barium</b>	<b>0.25</b>	<b>J</b>	0.50	0.050	mg/L		04/29/24 08:50	04/30/24 01:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		04/29/24 08:50	04/30/24 01:16	1
<b>Boron</b>	<b>0.069</b>	<b>J</b>	0.10	0.050	mg/L		04/29/24 08:50	04/30/24 01:16	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		04/29/24 08:50	04/30/24 01:16	1
<b>Calcium</b>	<b>13</b>		2.5	0.50	mg/L		04/29/24 08:50	04/30/24 01:16	1
<b>Chromium</b>	<b>0.057</b>		0.025	0.010	mg/L		04/29/24 08:50	04/30/24 01:16	1
<b>Cobalt</b>	<b>0.015</b>	<b>J</b>	0.025	0.010	mg/L		04/29/24 08:50	04/30/24 12:49	1
<b>Iron</b>	<b>51</b>		0.40	0.20	mg/L		04/29/24 08:50	04/30/24 01:16	1
<b>Lead</b>	<b>0.082</b>		0.0075	0.0075	mg/L		04/29/24 08:50	04/30/24 01:16	1
<b>Manganese</b>	<b>0.34</b>		0.025	0.010	mg/L		04/29/24 08:50	04/30/24 01:16	1
<b>Nickel</b>	<b>0.051</b>		0.025	0.010	mg/L		04/29/24 08:50	04/30/24 01:16	1
<b>Potassium</b>	<b>10</b>		2.5	0.50	mg/L		04/29/24 08:50	04/30/24 01:16	1
Selenium	<0.050		0.050	0.020	mg/L		04/29/24 08:50	04/30/24 01:16	1
Silver	<0.025		0.025	0.010	mg/L		04/29/24 08:50	04/30/24 01:16	1
<b>Zinc</b>	<b>0.22</b>	<b>J</b>	0.50	0.020	mg/L		04/29/24 08:50	04/30/24 01:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		04/29/24 08:50	05/01/24 18:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		04/29/24 08:50	05/01/24 18:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		04/29/24 10:55	04/30/24 10:42	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.042</b>		0.020	0.0082	mg/Kg	⊛	04/30/24 15:30	05/01/24 08:56	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.32</b>		0.27	0.14	mg/Kg	⊛	05/02/24 15:24	05/02/24 16:51	1
<b>pH (SW846 9045D)</b>	<b>7.9</b>		0.2	0.2	SU			04/26/24 14:22	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003A

Job ID: 500-249272-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### GC/MS Semi VOA

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

## Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## General Chemistry

Qualifier	Qualifier Description
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.
$\alpha$	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

Euofins Chicago

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003A

Job ID: 500-249272-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003A

Job ID: 500-249272-1

## Laboratory: Eurofins Chicago

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


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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

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



# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com					 500-249272 COC					<b>Laboratory</b> Lab Eurofins - Chicago Address 2417 Bond Street University Park, IL 60484 Phone 708-534-5200 Contact Jodie Bracken email Jodie.Bracken@ET EurofinsUS.com					Project Name <u>AE8-003A</u> Project No <u>PTBLW0#1: 195-002/003A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>S. Ratalovic</u>					COC No <u>1</u> of <u>1</u> Lab Job No: <u>500-249272</u> Sample Temp: <u>98</u> <u>1013 → 1011</u>				
										<b>Special Instructions:</b> 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					<b>ANALYSES</b>									
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments							
1	62R60-B50	4/19/24	1300	S	X	X					X	X	X	X	X									
2	62R60-B51		1315																					
3	62R60-B52		1330																					
4	62R60-B53		1345																					
5	Trip Blank #4																							
Relinquished by <u>[Signature]</u>					Date/Time <u>4/19/24 14:40</u>					Received by <u>[Signature]</u>					Date/Time <u>4/19/24 14:40</u>									
Relinquished by <u>[Signature]</u>					Date/Time <u>4/19/24 1555</u>					Received by <u>[Signature]</u>					Date/Time <u>4/19/24 1555</u>									
Relinquished by					Date/Time					Received by					Date/Time									



# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

21W480-21W630 Irving Park Road, 1638 Irving Park Rd. (north side of Irving Park Rd. between Meacham Creek & Hillcrest Ave)

City: Itasca & Unincorporated State: IL Zip Code: 60143

County: DuPage Township: Bloomington

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

Latitude: 41.9754 Longitude: -88.04427  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

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

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

Estimated Volume of debris (cu. Yd.): 328

### II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATIONS 62R60-B29, 62R60-B30, 62R60-B31 AND 62R60-B32 WERE SAMPLED ADJACENT TO SITE 4386-59. SEE TABLE 3t AND FIGURE 9 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORTS- EUROFINS JOB ID NUMBERS: 500-223747-1 AND 500-223815.

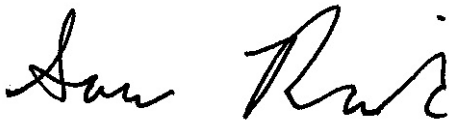
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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

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

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

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



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

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

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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***

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

ISGS Site 4386-59

Residences

Sample ID	62R60-B29	62R60-B30	62R60-B31	62R60-B32	Maximum Allowable Concentration							
Sample Depth (ft)	0-2	0-2	0-2	0-2	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area			
Sample Date	10/12/2022	10/12/2022	10/12/2022	10/13/2022								
PID	0	0	0	0								
Sample pH	8.5	8	8.6	8.5								
Matrix	Soil	Soil	Soil	Soil								
Semivolatile Organic Compounds (mg/kg)												
Benzo(a)pyrene	1.2	1,2,3	0.071	0.2	1,2	1.2	1,2,3	0.09	0.09	0.98	11.4	2.1
Benzo(b)fluoranthene	2	1,2,3	0.052	0.27		1.9	1,2,3	0.9	0.9	0.9	13.1	2.1
Dibenzo(a,h)anthracene	0.19	1,2,3	ND	0.04		0.15	1,2	0.09	0.09	0.15	1.03	0.42



## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223747-1  
Client Project/Site: IDOT - AE8-003

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

Attn: Ms. Colleen Grey



Authorized for release by:  
10/31/2022 3:49:46 PM

Richard Wright, Senior Project Manager  
(708)746-0045  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B29**

**Lab Sample ID: 500-223747-13**

**Date Collected: 10/12/22 11:30**

**Matrix: Solid**

**Date Received: 10/13/22 11:50**

**Percent Solids: 68.7**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0025		0.0025	0.00084	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
1,1,2,2-Tetrachloroethane	<0.0025		0.0025	0.00080	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
1,1,2-Trichloroethane	<0.0025		0.0025	0.0011	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
1,1-Dichloroethane	<0.0025		0.0025	0.00086	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
1,1-Dichloroethene	<0.0025		0.0025	0.00087	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
1,2-Dichloroethane	<0.0063		0.0063	0.0020	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
1,2-Dichloropropane	<0.0025		0.0025	0.00065	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
1,3-Dichloropropene, Total	<0.0025		0.0025	0.00088	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
2-Butanone (MEK)	<0.0063		0.0063	0.0028	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
2-Hexanone	<0.0063		0.0063	0.0020	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
4-Methyl-2-pentanone (MIBK)	<0.0063		0.0063	0.0019	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Acetone	<0.025	*1	0.025	0.011	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Benzene	<0.0025		0.0025	0.00064	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Bromodichloromethane	<0.0025		0.0025	0.00051	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Bromoform	<0.0025		0.0025	0.00074	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Bromomethane	<0.0063		0.0063	0.0024	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Carbon disulfide	<0.0063		0.0063	0.0013	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Carbon tetrachloride	<0.0025		0.0025	0.00073	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Chlorobenzene	<0.0025		0.0025	0.00093	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Chloroethane	<0.0063		0.0063	0.0019	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Chloroform	<0.0025		0.0025	0.00087	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Chloromethane	<0.0063		0.0063	0.0025	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
cis-1,2-Dichloroethene	<0.0025		0.0025	0.00070	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
cis-1,3-Dichloropropene	<0.0025		0.0025	0.00076	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Dibromochloromethane	<0.0025		0.0025	0.00082	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Ethylbenzene	<0.0025		0.0025	0.0012	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Methyl tert-butyl ether	<0.0025		0.0025	0.00074	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Methylene Chloride	<0.0063		0.0063	0.0025	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Styrene	<0.0025		0.0025	0.00076	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Tetrachloroethene	<0.0025		0.0025	0.00086	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Toluene	<0.0025		0.0025	0.00064	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
trans-1,2-Dichloroethene	<0.0025		0.0025	0.0011	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
trans-1,3-Dichloropropene	<0.0025		0.0025	0.00088	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Trichloroethene	<0.0025		0.0025	0.00085	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Vinyl chloride	<0.0025		0.0025	0.0011	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1
Xylenes, Total	<0.0050		0.0050	0.00081	mg/Kg	☼	10/13/22 19:28	10/20/22 16:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 134	10/13/22 19:28	10/20/22 16:39	1
4-Bromofluorobenzene (Surr)	90		75 - 131	10/13/22 19:28	10/20/22 16:39	1
Dibromofluoromethane	107		75 - 126	10/13/22 19:28	10/20/22 16:39	1
Toluene-d8 (Surr)	112		75 - 124	10/13/22 19:28	10/20/22 16:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.48		0.48	0.10	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
1,2-Dichlorobenzene	<0.48		0.48	0.11	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
1,3-Dichlorobenzene	<0.48		0.48	0.11	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
1,4-Dichlorobenzene	<0.48		0.48	0.12	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
2,2'-oxybis[1-chloropropane]	<0.48		0.48	0.11	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B29**

**Lab Sample ID: 500-223747-13**

**Date Collected: 10/12/22 11:30**

**Matrix: Solid**

**Date Received: 10/13/22 11:50**

**Percent Solids: 68.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.95		0.95	0.22	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
2,4,6-Trichlorophenol	<0.95		0.95	0.33	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
2,4-Dichlorophenol	<0.95		0.95	0.23	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
2,4-Dimethylphenol	<0.95		0.95	0.36	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
2,4-Dinitrophenol	<1.9		1.9	1.7	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
2,4-Dinitrotoluene	<0.48		0.48	0.15	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
2,6-Dinitrotoluene	<0.48		0.48	0.19	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
2-Chloronaphthalene	<0.48		0.48	0.11	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
2-Chlorophenol	<0.48		0.48	0.16	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
2-Methylnaphthalene	<0.19		0.19	0.018	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
2-Methylphenol	<0.48		0.48	0.15	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
2-Nitroaniline	<0.48		0.48	0.13	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
2-Nitrophenol	<0.95		0.95	0.23	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
3 & 4 Methylphenol	<0.48		0.48	0.16	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
3,3'-Dichlorobenzidine	<0.48		0.48	0.13	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
3-Nitroaniline	<0.95		0.95	0.30	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
4,6-Dinitro-2-methylphenol	<1.9		1.9	0.77	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
4-Bromophenyl phenyl ether	<0.48		0.48	0.13	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
4-Chloro-3-methylphenol	<0.95		0.95	0.33	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
4-Chloroaniline	<1.9		1.9	0.45	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
4-Chlorophenyl phenyl ether	<0.48		0.48	0.11	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
4-Nitroaniline	<0.95		0.95	0.40	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
4-Nitrophenol	<1.9		1.9	0.91	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
<b>Acenaphthene</b>	<b>0.029</b>	<b>J</b>	0.095	0.017	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
<b>Acenaphthylene</b>	<b>0.034</b>	<b>J</b>	0.095	0.013	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
<b>Anthracene</b>	<b>0.13</b>		0.095	0.016	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
<b>Benzo[a]anthracene</b>	<b>0.88</b>		0.095	0.013	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
<b>Benzo[a]pyrene</b>	<b>1.2</b>		0.095	0.019	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
<b>Benzo[b]fluoranthene</b>	<b>2.0</b>		0.095	0.021	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
<b>Benzo[g,h,i]perylene</b>	<b>0.62</b>		0.095	0.031	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
<b>Benzo[k]fluoranthene</b>	<b>0.65</b>		0.095	0.028	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
Bis(2-chloroethoxy)methane	<0.48		0.48	0.098	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
Bis(2-chloroethyl)ether	<0.48		0.48	0.14	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
Bis(2-ethylhexyl) phthalate	<0.48		0.48	0.17	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
Butyl benzyl phthalate	<0.48		0.48	0.18	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
<b>Carbazole</b>	<b>0.36</b>	<b>J</b>	0.48	0.24	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
<b>Chrysene</b>	<b>1.2</b>		0.095	0.026	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
<b>Dibenz(a,h)anthracene</b>	<b>0.19</b>		0.095	0.018	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
Dibenzofuran	<0.48		0.48	0.11	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
Diethyl phthalate	<0.48		0.48	0.16	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
Dimethyl phthalate	<0.48		0.48	0.12	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
Di-n-butyl phthalate	<0.48		0.48	0.15	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
Di-n-octyl phthalate	<0.48		0.48	0.16	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
<b>Fluoranthene</b>	<b>2.4</b>		0.095	0.018	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
<b>Fluorene</b>	<b>0.027</b>	<b>J</b>	0.095	0.013	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
Hexachlorobenzene	<0.19		0.19	0.022	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
Hexachlorobutadiene	<0.48		0.48	0.15	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
Hexachlorocyclopentadiene	<1.9		1.9	0.55	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2
Hexachloroethane	<0.48		0.48	0.15	mg/Kg	☼	10/24/22 07:02	10/28/22 17:26	2

Euofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B29**

**Lab Sample ID: 500-223747-13**

Date Collected: 10/12/22 11:30

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 68.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.64</b>		0.095	0.025	mg/Kg	✳	10/24/22 07:02	10/28/22 17:26	2
Isophorone	<0.48		0.48	0.11	mg/Kg	✳	10/24/22 07:02	10/28/22 17:26	2
Naphthalene	<0.095		0.095	0.015	mg/Kg	✳	10/24/22 07:02	10/28/22 17:26	2
Nitrobenzene	<0.095		0.095	0.024	mg/Kg	✳	10/24/22 07:02	10/28/22 17:26	2
N-Nitrosodi-n-propylamine	<0.19		0.19	0.12	mg/Kg	✳	10/24/22 07:02	10/28/22 17:26	2
N-Nitrosodiphenylamine	<0.48		0.48	0.11	mg/Kg	✳	10/24/22 07:02	10/28/22 17:26	2
Pentachlorophenol	<1.9		1.9	1.5	mg/Kg	✳	10/24/22 07:02	10/28/22 17:26	2
<b>Phenanthrene</b>	<b>0.68</b>		0.095	0.013	mg/Kg	✳	10/24/22 07:02	10/28/22 17:26	2
Phenol	<0.48		0.48	0.21	mg/Kg	✳	10/24/22 07:02	10/28/22 17:26	2
<b>Pyrene</b>	<b>1.6</b>		0.095	0.019	mg/Kg	✳	10/24/22 07:02	10/28/22 17:26	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	85		31 - 143				10/24/22 07:02	10/28/22 17:26	2
2-Fluorobiphenyl	73		43 - 145				10/24/22 07:02	10/28/22 17:26	2
2-Fluorophenol	110		31 - 166				10/24/22 07:02	10/28/22 17:26	2
Nitrobenzene-d5 (Surr)	62		37 - 147				10/24/22 07:02	10/28/22 17:26	2
Phenol-d5	85		30 - 153				10/24/22 07:02	10/28/22 17:26	2
Terphenyl-d14 (Surr)	77		42 - 157				10/24/22 07:02	10/28/22 17:26	2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.37</b>	J	1.3	0.26	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
<b>Arsenic</b>	<b>4.0</b>		0.67	0.23	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
<b>Barium</b>	<b>50</b>		3.4	0.38	mg/Kg	✳	10/20/22 09:59	10/25/22 16:18	5
<b>Beryllium</b>	<b>0.49</b>		0.27	0.063	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
<b>Boron</b>	<b>12</b>		3.4	0.31	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
<b>Cadmium</b>	<b>0.55</b>		0.13	0.024	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
<b>Calcium</b>	<b>150000</b>		67	11	mg/Kg	✳	10/20/22 09:59	10/25/22 16:18	5
<b>Chromium</b>	<b>21</b>		0.67	0.33	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
<b>Cobalt</b>	<b>4.6</b>		0.34	0.088	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
<b>Copper</b>	<b>37</b>		0.67	0.19	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
<b>Iron</b>	<b>13000</b>		67	35	mg/Kg	✳	10/20/22 09:59	10/25/22 16:18	5
<b>Lead</b>	<b>77</b>		0.34	0.16	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
<b>Magnesium</b>	<b>81000</b>		34	17	mg/Kg	✳	10/20/22 09:59	10/25/22 16:18	5
<b>Manganese</b>	<b>280</b>		3.4	0.49	mg/Kg	✳	10/20/22 09:59	10/25/22 16:18	5
<b>Nickel</b>	<b>15</b>		0.67	0.20	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
<b>Potassium</b>	<b>1300</b>		34	12	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
Selenium	<0.67		0.67	0.39	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
<b>Silver</b>	<b>0.36</b>		0.34	0.087	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
<b>Sodium</b>	<b>1300</b>		67	9.9	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
Thallium	<0.67		0.67	0.33	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
<b>Vanadium</b>	<b>15</b>		0.34	0.079	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1
<b>Zinc</b>	<b>140</b>		1.3	0.59	mg/Kg	✳	10/20/22 09:59	10/24/22 21:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		10/21/22 22:40	10/25/22 21:17	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/21/22 22:40	10/25/22 21:17	1
<b>Manganese</b>	<b>0.28</b>		0.025	0.010	mg/L		10/21/22 22:40	10/25/22 21:17	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B29**

**Lab Sample ID: 500-223747-13**

Date Collected: 10/12/22 11:30

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 68.7

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.013	J	0.050	0.010	mg/L		10/21/22 22:43	10/24/22 22:59	1
Barium	0.21	J	0.50	0.050	mg/L		10/21/22 22:43	10/24/22 22:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/21/22 22:43	10/24/22 22:59	1
Boron	0.082	J B	0.10	0.050	mg/L		10/21/22 22:43	10/24/22 22:59	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/21/22 22:43	10/24/22 22:59	1
Calcium	18		2.5	0.50	mg/L		10/21/22 22:43	10/24/22 22:59	1
Chromium	0.066		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 22:59	1
Cobalt	0.016	J	0.025	0.010	mg/L		10/21/22 22:43	10/24/22 22:59	1
Iron	48	B	0.40	0.20	mg/L		10/21/22 22:43	10/24/22 22:59	1
Lead	0.25		0.0075	0.0075	mg/L		10/21/22 22:43	10/24/22 22:59	1
Manganese	0.50	^2	0.025	0.010	mg/L		10/21/22 22:43	10/24/22 22:59	1
Nickel	0.053		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 22:59	1
Potassium	9.3		2.5	0.50	mg/L		10/21/22 22:43	10/24/22 22:59	1
Selenium	<0.050		0.050	0.020	mg/L		10/21/22 22:43	10/24/22 22:59	1
Silver	<0.025		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 22:59	1
Zinc	0.66		0.50	0.020	mg/L		10/21/22 22:43	10/24/22 22:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/21/22 22:43	10/26/22 23:47	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/21/22 22:43	10/26/22 23:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^1+	0.00020	0.00020	mg/L		10/22/22 12:15	10/24/22 17:31	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.082	B	0.024	0.0079	mg/Kg	⊛	10/22/22 14:35	10/25/22 16:21	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.4		1.4	0.46	mg/Kg	⊛	10/26/22 04:06	10/26/22 18:26	1
pH (SW846 9045D)	8.5		0.2	0.2	SU			10/18/22 14:19	1



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B30**

**Lab Sample ID: 500-223747-15**

**Date Collected: 10/12/22 11:50**

**Matrix: Solid**

**Date Received: 10/13/22 11:50**

**Percent Solids: 85.1**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Acetone	<0.019	*1	0.019	0.0082	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	☼	10/13/22 19:28	10/20/22 17:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		70 - 134	10/13/22 19:28	10/20/22 17:26	1
4-Bromofluorobenzene (Surr)	90		75 - 131	10/13/22 19:28	10/20/22 17:26	1
Dibromofluoromethane	108		75 - 126	10/13/22 19:28	10/20/22 17:26	1
Toluene-d8 (Surr)	102		75 - 124	10/13/22 19:28	10/20/22 17:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B30**

**Lab Sample ID: 500-223747-15**

**Date Collected: 10/12/22 11:50**

**Matrix: Solid**

**Date Received: 10/13/22 11:50**

**Percent Solids: 85.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
3,3'-Dichlorobenzidine	<0.20	*3	0.20	0.054	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
<b>Benzo[a]anthracene</b>	<b>0.041</b>	<b>*3</b>	0.039	0.0052	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
<b>Benzo[a]pyrene</b>	<b>0.071</b>	<b>*3</b>	0.039	0.0075	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
<b>Benzo[b]fluoranthene</b>	<b>0.052</b>	<b>*3</b>	0.039	0.0084	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
<b>Benzo[g,h,i]perylene</b>	<b>0.039</b>	<b>*3</b>	0.039	0.013	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
<b>Benzo[k]fluoranthene</b>	<b>0.048</b>	<b>*3</b>	0.039	0.011	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Bis(2-ethylhexyl) phthalate	<0.20	*3	0.20	0.071	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Butyl benzyl phthalate	<0.20	*3	0.20	0.074	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Carbazole	<0.20		0.20	0.097	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
<b>Chrysene</b>	<b>0.053</b>	<b>*3</b>	0.039	0.011	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Dibenz(a,h)anthracene	<0.039	*3	0.039	0.0075	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Dibenzofuran	<0.20		0.20	0.045	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
<b>Fluoranthene</b>	<b>0.060</b>		0.039	0.0072	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1

Euofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B30**

**Lab Sample ID: 500-223747-15**

Date Collected: 10/12/22 11:50

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 85.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039	*3	0.039	0.010	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
<b>Phenanthrene</b>	<b>0.028</b>	<b>J</b>	0.039	0.0054	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Phenol	<0.20		0.20	0.086	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
<b>Pyrene</b>	<b>0.15</b>	<b>*3</b>	0.039	0.0077	mg/Kg	☼	10/24/22 07:02	10/27/22 18:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	117		31 - 143				10/24/22 07:02	10/27/22 18:34	1
2-Fluorobiphenyl	79		43 - 145				10/24/22 07:02	10/27/22 18:34	1
2-Fluorophenol	116		31 - 166				10/24/22 07:02	10/27/22 18:34	1
Nitrobenzene-d5 (Surr)	76		37 - 147				10/24/22 07:02	10/27/22 18:34	1
Phenol-d5	85		30 - 153				10/24/22 07:02	10/27/22 18:34	1
Terphenyl-d14 (Surr)	293	S1+ *3	42 - 157				10/24/22 07:02	10/27/22 18:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.71</b>	<b>J</b>	1.1	0.21	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Arsenic</b>	<b>8.2</b>		0.54	0.19	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Barium</b>	<b>73</b>		0.54	0.062	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Beryllium</b>	<b>0.83</b>		0.22	0.051	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Boron</b>	<b>5.7</b>		2.7	0.25	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Cadmium</b>	<b>0.14</b>		0.11	0.019	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Calcium</b>	<b>5200</b>		11	1.8	mg/Kg	☼	10/20/22 09:59	10/25/22 16:24	1
<b>Chromium</b>	<b>17</b>		0.54	0.27	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Cobalt</b>	<b>14</b>		0.27	0.071	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Copper</b>	<b>27</b>		0.54	0.15	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Iron</b>	<b>20000</b>	<b>^2</b>	11	5.6	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Lead</b>	<b>32</b>		0.27	0.13	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Magnesium</b>	<b>4400</b>	<b>^2</b>	5.4	2.7	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Manganese</b>	<b>390</b>	<b>^2</b>	0.54	0.078	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Nickel</b>	<b>26</b>		0.54	0.16	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Potassium</b>	<b>1700</b>		27	9.6	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Selenium</b>	<b>0.60</b>		0.54	0.32	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Silver</b>	<b>0.28</b>		0.27	0.070	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Sodium</b>	<b>610</b>		54	8.0	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Thallium</b>	<b>0.52</b>	<b>J</b>	0.54	0.27	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Vanadium</b>	<b>25</b>		0.27	0.064	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1
<b>Zinc</b>	<b>67</b>		1.1	0.48	mg/Kg	☼	10/20/22 09:59	10/24/22 21:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/21/22 22:40	10/25/22 21:23	1
<b>Iron</b>	<b>0.82</b>		0.40	0.20	mg/L		10/21/22 22:40	10/25/22 21:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/21/22 22:40	10/25/22 21:23	1
<b>Manganese</b>	<b>0.12</b>		0.025	0.010	mg/L		10/21/22 22:40	10/25/22 21:23	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B30**

**Lab Sample ID: 500-223747-15**

Date Collected: 10/12/22 11:50

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 85.1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.029	J	0.050	0.010	mg/L		10/21/22 22:43	10/24/22 23:06	1
Barium	0.41	J	0.50	0.050	mg/L		10/21/22 22:43	10/24/22 23:06	1
Beryllium	0.0041		0.0040	0.0040	mg/L		10/21/22 22:43	10/24/22 23:06	1
Boron	0.10	B	0.10	0.050	mg/L		10/21/22 22:43	10/24/22 23:06	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/21/22 22:43	10/24/22 23:06	1
Calcium	16		2.5	0.50	mg/L		10/21/22 22:43	10/24/22 23:06	1
Chromium	0.095		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 23:06	1
Cobalt	0.023	J	0.025	0.010	mg/L		10/21/22 22:43	10/24/22 23:06	1
Iron	93	B	0.40	0.20	mg/L		10/21/22 22:43	10/24/22 23:06	1
Lead	0.074		0.0075	0.0075	mg/L		10/21/22 22:43	10/24/22 23:06	1
Manganese	0.60	^2	0.025	0.010	mg/L		10/21/22 22:43	10/24/22 23:06	1
Nickel	0.10		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 23:06	1
Potassium	16		2.5	0.50	mg/L		10/21/22 22:43	10/24/22 23:06	1
Selenium	<0.050		0.050	0.020	mg/L		10/21/22 22:43	10/24/22 23:06	1
Silver	<0.025		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 23:06	1
Zinc	0.28	J	0.50	0.020	mg/L		10/21/22 22:43	10/24/22 23:06	1

**Method: SW846 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		10/21/22 22:40	10/27/22 01:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/21/22 22:43	10/26/22 23:54	1
Thallium	0.0029		0.0020	0.0020	mg/L		10/21/22 22:43	10/26/22 23:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020	^1+	0.00020	0.00020	mg/L		10/22/22 12:15	10/24/22 17:36	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.080	B	0.018	0.0061	mg/Kg	☼	10/22/22 14:35	10/25/22 16:28	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.1		1.1	0.36	mg/Kg	☼	10/26/22 04:06	10/26/22 18:33	1
pH (SW846 9045D)	8.0		0.2	0.2	SU			10/18/22 17:08	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B31**

**Lab Sample ID: 500-223747-18**

**Date Collected: 10/12/22 12:35**

**Matrix: Solid**

**Date Received: 10/13/22 11:50**

**Percent Solids: 82.9**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00065	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00087	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
1,1-Dichloroethane	<0.0020		0.0020	0.00070	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
1,1-Dichloroethene	<0.0020		0.0020	0.00070	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
1,2-Dichloroethane	<0.0051		0.0051	0.0016	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00071	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
2-Butanone (MEK)	<0.0051		0.0051	0.0023	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0015	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Acetone	<0.020		0.020	0.0088	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Benzene	<0.0020		0.0020	0.00052	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Bromoform	<0.0020		0.0020	0.00059	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Carbon disulfide	<0.0051		0.0051	0.0011	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Carbon tetrachloride	<0.0020		0.0020	0.00059	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Chlorobenzene	<0.0020		0.0020	0.00075	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Chloroethane	<0.0051		0.0051	0.0015	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Chloroform	<0.0020		0.0020	0.00070	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Chloromethane	<0.0051		0.0051	0.0020	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00057	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00061	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Dibromochloromethane	<0.0020		0.0020	0.00066	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Ethylbenzene	<0.0020		0.0020	0.00097	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00060	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Methylene Chloride	<0.0051		0.0051	0.0020	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Styrene	<0.0020		0.0020	0.00061	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Tetrachloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00090	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00071	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Trichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Vinyl chloride	<0.0020		0.0020	0.00090	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1
Xylenes, Total	<0.0041		0.0041	0.00065	mg/Kg	☼	10/13/22 19:28	10/21/22 14:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		70 - 134	10/13/22 19:28	10/21/22 14:02	1
4-Bromofluorobenzene (Surr)	89		75 - 131	10/13/22 19:28	10/21/22 14:02	1
Dibromofluoromethane	108		75 - 126	10/13/22 19:28	10/21/22 14:02	1
Toluene-d8 (Surr)	104		75 - 124	10/13/22 19:28	10/21/22 14:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B31**

**Lab Sample ID: 500-223747-18**

Date Collected: 10/12/22 12:35

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
3,3'-Dichlorobenzidine	<0.20	*3	0.20	0.056	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
<b>Acenaphthene</b>	<b>0.0090</b>	<b>J</b>	0.040	0.0072	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
<b>Anthracene</b>	<b>0.038</b>	<b>J</b>	0.040	0.0067	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
<b>Benzo[a]anthracene</b>	<b>0.14</b>	<b>*3</b>	0.040	0.0054	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
<b>Benzo[a]pyrene</b>	<b>0.20</b>	<b>*3</b>	0.040	0.0078	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
<b>Benzo[b]fluoranthene</b>	<b>0.27</b>	<b>*3</b>	0.040	0.0086	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
<b>Benzo[g,h,i]perylene</b>	<b>0.098</b>	<b>*3</b>	0.040	0.013	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
<b>Benzo[k]fluoranthene</b>	<b>0.13</b>	<b>*3</b>	0.040	0.012	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
<b>Bis(2-ethylhexyl) phthalate</b>	<b>0.077</b>	<b>J *3</b>	0.20	0.073	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Butyl benzyl phthalate	<0.20	*3	0.20	0.076	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
<b>Chrysene</b>	<b>0.18</b>	<b>*3</b>	0.040	0.011	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
<b>Dibenz(a,h)anthracene</b>	<b>0.040</b>	<b>*3</b>	0.040	0.0077	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
<b>Fluoranthene</b>	<b>0.25</b>		0.040	0.0074	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
<b>Fluorene</b>	<b>0.0057</b>	<b>J</b>	0.040	0.0056	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B31**

**Lab Sample ID: 500-223747-18**

Date Collected: 10/12/22 12:35

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.13</b>	<b>*3</b>	0.040	0.010	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
<b>Phenanthrene</b>	<b>0.13</b>		0.040	0.0056	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
<b>Pyrene</b>	<b>0.62</b>	<b>*3</b>	0.040	0.0080	mg/Kg	☼	10/24/22 07:02	10/27/22 19:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	90		31 - 143				10/24/22 07:02	10/27/22 19:43	1
2-Fluorobiphenyl	86		43 - 145				10/24/22 07:02	10/27/22 19:43	1
2-Fluorophenol	97		31 - 166				10/24/22 07:02	10/27/22 19:43	1
Nitrobenzene-d5 (Surr)	68		37 - 147				10/24/22 07:02	10/27/22 19:43	1
Phenol-d5	96		30 - 153				10/24/22 07:02	10/27/22 19:43	1
Terphenyl-d14 (Surr)	254	S1+ *3	42 - 157				10/24/22 07:02	10/27/22 19:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.37</b>	<b>J</b>	1.2	0.23	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Arsenic</b>	<b>7.0</b>		0.60	0.20	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Barium</b>	<b>61</b>		0.60	0.068	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Beryllium</b>	<b>0.89</b>		0.24	0.056	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Boron</b>	<b>8.9</b>		3.0	0.28	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Cadmium</b>	<b>0.41</b>		0.12	0.021	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Calcium</b>	<b>21000</b>		12	2.0	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Chromium</b>	<b>19</b>		0.60	0.30	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Cobalt</b>	<b>11</b>		0.30	0.078	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Copper</b>	<b>39</b>		0.60	0.17	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Iron</b>	<b>19000</b>		12	6.2	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Lead</b>	<b>120</b>		0.30	0.14	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Magnesium</b>	<b>12000</b>	<b>^2</b>	6.0	3.0	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Manganese</b>	<b>270</b>	<b>^2</b>	0.60	0.087	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Nickel</b>	<b>27</b>		0.60	0.17	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Potassium</b>	<b>2200</b>		30	11	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Selenium</b>	<b>0.40</b>	<b>J</b>	0.60	0.35	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Silver</b>	<b>0.33</b>		0.30	0.077	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Sodium</b>	<b>1600</b>		60	8.8	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Thallium</b>	<b>0.60</b>		0.60	0.30	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Vanadium</b>	<b>26</b>		0.30	0.070	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1
<b>Zinc</b>	<b>110</b>		1.2	0.52	mg/Kg	☼	10/20/22 09:59	10/24/22 22:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/21/22 22:40	10/25/22 21:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/21/22 22:40	10/25/22 21:33	1
Chromium	<0.025		0.025	0.010	mg/L		10/21/22 22:40	10/25/22 21:33	1
<b>Iron</b>	<b>0.57</b>		0.40	0.20	mg/L		10/21/22 22:40	10/25/22 21:33	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

**Client Sample ID: 62R60-B31**

**Lab Sample ID: 500-223747-18**

Date Collected: 10/12/22 12:35

Matrix: Solid

Date Received: 10/13/22 11:50

Percent Solids: 82.9

**Method: SW846 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		10/21/22 22:40	10/25/22 21:33	1
<b>Manganese</b>	<b>0.38</b>		0.025	0.010	mg/L		10/21/22 22:40	10/25/22 21:33	1
Nickel	<0.025		0.025	0.010	mg/L		10/21/22 22:40	10/25/22 21:33	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.097</b>		0.050	0.010	mg/L		10/21/22 22:43	10/24/22 23:22	1
<b>Barium</b>	<b>1.0</b>		0.50	0.050	mg/L		10/21/22 22:43	10/24/22 23:22	1
<b>Beryllium</b>	<b>0.013</b>		0.0040	0.0040	mg/L		10/21/22 22:43	10/24/22 23:22	1
<b>Boron</b>	<b>0.18</b>	<b>B</b>	0.10	0.050	mg/L		10/21/22 22:43	10/24/22 23:22	1
<b>Cadmium</b>	<b>0.0025</b>	<b>J</b>	0.0050	0.0020	mg/L		10/21/22 22:43	10/24/22 23:22	1
<b>Calcium</b>	<b>56</b>		2.5	0.50	mg/L		10/21/22 22:43	10/24/22 23:22	1
<b>Chromium</b>	<b>0.27</b>		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 23:22	1
<b>Cobalt</b>	<b>0.078</b>		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 23:22	1
<b>Iron</b>	<b>290</b>	<b>B</b>	0.40	0.20	mg/L		10/21/22 22:43	10/24/22 23:22	1
<b>Lead</b>	<b>0.40</b>		0.0075	0.0075	mg/L		10/21/22 22:43	10/24/22 23:22	1
<b>Manganese</b>	<b>1.3</b>	<b>^2</b>	0.025	0.010	mg/L		10/21/22 22:43	10/24/22 23:22	1
<b>Nickel</b>	<b>0.32</b>		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 23:22	1
<b>Potassium</b>	<b>35</b>		2.5	0.50	mg/L		10/21/22 22:43	10/24/22 23:22	1
Selenium	<0.050		0.050	0.020	mg/L		10/21/22 22:43	10/24/22 23:22	1
Silver	<0.025		0.025	0.010	mg/L		10/21/22 22:43	10/24/22 23:22	1
<b>Zinc</b>	<b>1.2</b>		0.50	0.020	mg/L		10/21/22 22:43	10/24/22 23:22	1

**Method: SW846 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		10/21/22 22:40	10/27/22 01:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/21/22 22:43	10/27/22 00:04	1
<b>Thallium</b>	<b>0.0055</b>		0.0020	0.0020	mg/L		10/21/22 22:43	10/27/22 00:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00050		0.00050	0.00050	mg/L		10/22/22 12:15	10/25/22 12:30	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.095</b>	<b>B</b>	0.019	0.0064	mg/Kg	⊛	10/22/22 14:35	10/25/22 16:34	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<1.2		1.2	0.39	mg/Kg	⊛	10/26/22 04:06	10/26/22 18:36	1
<b>pH (SW846 9045D)</b>	<b>8.6</b>		0.2	0.2	SU			10/18/22 17:16	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
^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.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, 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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223747-1

## Laboratory: Eurofins Chicago

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

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

## Laboratory: Eurofins Cedar Falls

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

Authority	Program	Identification Number	Expiration Date
Colorado	Petroleum Storage Tank Program	IA100001 (OR)	09-29-23
Georgia	State	IA100001 (OR)	09-29-23
Illinois	NELAP	200024	11-29-22
Iowa	State	007	12-01-23
Kansas	NELAP	E-10341	01-31-23
Minnesota	NELAP	019-999-319	12-31-22
Minnesota (Petrofund)	State	3349	01-18-24
North Dakota	State	R-186	09-29-23
Oregon	NELAP	IA100001	09-29-23





# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	<b>Laboratory</b> Lab <u>Test America - Chicago</u> Address <u>2417 Bond Street</u> <u>University Park, IL 60484</u> Phone <u>708-534-5200</u> Contact <u>Dick Wright</u> email <u>richard.wright@testamericainc.com</u>	Project Name <u>AC8-003A</u> Project No <u>PTB/WO #: 195-002/003A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>K. Moore / S. Khodaei</u>	COC No <u>2</u> of <u>2</u> Lab Job No <u>500-223749</u> Sample Temp
--	--	--	--

**Special Instructions:**  
See Table 2 for complete parameter lists and minimum reporting limits  
\* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal  
\*\* If SPLP result exceeds Class I Standard, run TCLP for that specific parameter  
\*\*\* If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide

ANALYSES														
VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization			

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

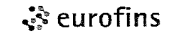
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				Comments
12	62R60-B27	10/12/22	1040	S	X	X					X	X	X	X	X					
13	62R60-B29		1130																	
14	62R60-B40		1135																	
15	62R60-B30		1150																	
16	62R60-B41		1205																	
17	62R60-B42		1220																	
18	62R60-B31		1235																	
19	Tip Blot			W	X															

Relinquished by <u>Paul Khodaei</u>	Date/Time <u>10/13/22</u>	Received by <u>Paul Khodaei</u>	Date/Time <u>10/13/22 10:49</u>
Relinquished by <u>Paul Khodaei</u>	Date/Time <u>10/13/22 10:49</u>	Received by <u>Paul Khodaei</u>	Date/Time <u>10/13/27 10:49</u>
Relinquished by <u>Paul Khodaei</u>	Date/Time <u>10/13/22 1150</u>	Received by <u>Paul Khodaei</u>	Date/Time <u>10/13/22 1150</u>

**Eurofins Chicago**

2417 Bond Street  
 University Park, IL 60484  
 Phone 708-534-5200 Fax. 708-534-5211

**Chain of Custody Record**



Environment Testing  
 America

<b>Client Information (Sub Contract Lab)</b>		Sampler		Lab PM: Wright, Richard		Carrier Tracking No(s):		COC No: 500-166504.2			
Client Contact: Shipping/Receiving		Phone:		E-Mail: Richard.Wright@et.eurofinsus.com		State of Origin: Illinois		Page: Page 2 of 2			
Company: Eurofins Environment Testing North Centr				Accreditations Required (See note): NELAP - Illinois				Job #: 500-223747-1			
Address: 3019 Venture Way,		Due Date Requested 10/26/2022		<b>Analysis Requested</b>						<b>Preservation Codes:</b> A - HCL                      M - Hexane B - NaOH                    N - None C - Zn Acetate              O - AsNaO2 D - Nitric Acid              P - Na2O4S E - NaHSO4                 Q - Na2SO3 F - MeOH                    R - Na2S2O3 G - Amchlor                S - H2SO4 H - Ascorbic Acid         T - TSP Dodecahydrate I - Ice                         U - Acetone J - DI Water                V - MCAA K - EDTA                    W - pH 4-5 L - EDA                      Y - Trizma Z - other (specify)  Other:	
City: Cedar Falls		TAT Requested (days):									
State, Zip: IA, 50613		PO #:									
Phone: 319-277-2401(Tel) 319-277-2425(Fax)		WO #:									
Email:		Project #: 50020681									
Project Name: IDOT - AE8-003		SSOW#:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		9012B/9012B_Prep Total Cyanide			
Site:		Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)		Sample Type (C=Comp, G=grab)		Total Number of containers		Special Instructions/Note			
<b>Sample Identification - Client ID (Lab ID)</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Preservation Code:</b>					
62R60-B28 (500-223747-10)		10/12/22		10 30 Central		Solid		X			
62R60-B27 (500-223747-12)		10/12/22		10 40 Central		Solid		X			
62R60-B29 (500-223747-13)		10/12/22		11 30 Central		Solid		X			
62R60-B40 (500-223747-14)		10/12/22		11 35 Central		Solid		X			
62R60-B30 (500-223747-15)		10/12/22		11 50 Central		Solid		X			
62R60-B41 (500-223747-16)		10/12/22		12 05 Central		Solid		X			
62R60-B42 (500-223747-17)		10/12/22		12 20 Central		Solid		X			
62R60-B31 (500-223747-18)		10/12/22		12 35 Central		Solid		X			

Page 163 of 165

10/31/2022

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

<b>Possible Hazard Identification</b>		<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>	
Unconfirmed		<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested I, II, III, IV, Other (specify)		Special Instructions/QC Requirements	

Empty Kit Relinquished by:		Date		Time		Method of Shipment:	
Relinquished by: <i>[Signature]</i>		Date/Time: 10/24/22 17:00		Company:		Received by:	
Relinquished by:		Date/Time:		Company:		Received by:	
Relinquished by:		Date/Time:		Company:		Received by: <i>[Signature]</i>	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No		Cooler Temperature(s) °C and Other Remarks: 10K5/22 0945			



## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223815-1  
Client Project/Site: IDOT - AE8-003  
Revision: 1

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

Attn: Ms. Colleen Grey

*Jodie Bracken*

Authorized for release by:

11/10/2022 5:20:22 PM

Jodie Bracken, Project Management Assistant II

[Jodie.Bracken@et.eurofinsus.com](mailto:Jodie.Bracken@et.eurofinsus.com)

Designee for

Richard Wright, Senior Project Manager

(708)746-0045

[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the {0} Project Manager.

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B32**

**Lab Sample ID: 500-223815-2**

**Date Collected: 10/13/22 09:45**

**Matrix: Solid**

**Date Received: 10/14/22 11:00**

**Percent Solids: 80.9**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	10/14/22 20:12	10/23/22 13:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 134	10/14/22 20:12	10/23/22 13:45	1
4-Bromofluorobenzene (Surr)	100		75 - 131	10/14/22 20:12	10/23/22 13:45	1
Dibromofluoromethane	107		75 - 126	10/14/22 20:12	10/23/22 13:45	1
Toluene-d8 (Surr)	111		75 - 124	10/14/22 20:12	10/23/22 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.30		0.30	0.064	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
1,2-Dichlorobenzene	<0.30		0.30	0.071	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
1,3-Dichlorobenzene	<0.30		0.30	0.067	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
1,4-Dichlorobenzene	<0.30		0.30	0.076	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
2,2'-oxybis[1-chloropropane]	<0.30		0.30	0.069	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B32**

**Lab Sample ID: 500-223815-2**

**Date Collected: 10/13/22 09:45**

**Matrix: Solid**

**Date Received: 10/14/22 11:00**

**Percent Solids: 80.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.59		0.59	0.14	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
2,4,6-Trichlorophenol	<0.59		0.59	0.20	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
2,4-Dichlorophenol	<0.59		0.59	0.14	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
2,4-Dimethylphenol	<0.59		0.59	0.22	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
2,4-Dinitrophenol	<1.2		1.2	1.0	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
2,4-Dinitrotoluene	<0.30		0.30	0.094	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
2,6-Dinitrotoluene	<0.30		0.30	0.12	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
2-Chloronaphthalene	<0.30		0.30	0.065	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
2-Chlorophenol	<0.30		0.30	0.10	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
2-Methylnaphthalene	<0.12		0.12	0.011	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
2-Methylphenol	<0.30		0.30	0.095	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
2-Nitroaniline	<0.30		0.30	0.080	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
2-Nitrophenol	<0.59		0.59	0.14	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
3 & 4 Methylphenol	<0.30		0.30	0.099	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
3,3'-Dichlorobenzidine	<0.30		0.30	0.083	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
3-Nitroaniline	<0.59		0.59	0.18	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
4,6-Dinitro-2-methylphenol	<1.2		1.2	0.48	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
4-Bromophenyl phenyl ether	<0.30		0.30	0.078	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
4-Chloro-3-methylphenol	<0.59		0.59	0.20	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
4-Chloroaniline	<1.2		1.2	0.28	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
4-Chlorophenyl phenyl ether	<0.30		0.30	0.069	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
4-Nitroaniline	<0.59		0.59	0.25	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
4-Nitrophenol	<1.2		1.2	0.56	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Acenaphthene</b>	<b>0.022</b>	<b>J</b>	0.059	0.011	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Acenaphthylene</b>	<b>0.012</b>	<b>J</b>	0.059	0.0078	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Anthracene</b>	<b>0.10</b>		0.059	0.0099	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Benzo[a]anthracene</b>	<b>0.82</b>		0.059	0.0080	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Benzo[a]pyrene</b>	<b>1.2</b>	<b>*3</b>	0.059	0.011	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Benzo[b]fluoranthene</b>	<b>1.9</b>	<b>*3</b>	0.059	0.013	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Benzo[g,h,i]perylene</b>	<b>0.58</b>	<b>*3 *+</b>	0.059	0.019	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Benzo[k]fluoranthene</b>	<b>0.75</b>	<b>*3</b>	0.059	0.017	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Bis(2-chloroethoxy)methane	<0.30		0.30	0.060	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Bis(2-chloroethyl)ether	<0.30		0.30	0.089	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Bis(2-ethylhexyl) phthalate</b>	<b>0.12</b>	<b>J</b>	0.30	0.11	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Butyl benzyl phthalate	<0.30		0.30	0.11	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Carbazole	<0.30		0.30	0.15	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Chrysene</b>	<b>1.1</b>		0.059	0.016	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Dibenz(a,h)anthracene</b>	<b>0.15</b>	<b>*3</b>	0.059	0.011	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Dibenzofuran	<0.30		0.30	0.069	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Diethyl phthalate	<0.30		0.30	0.10	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Dimethyl phthalate	<0.30		0.30	0.077	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Di-n-butyl phthalate	<0.30		0.30	0.090	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Di-n-octyl phthalate	<0.30		0.30	0.097	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Fluoranthene</b>	<b>1.7</b>		0.059	0.011	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Fluorene</b>	<b>0.020</b>	<b>J</b>	0.059	0.0083	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Hexachlorobenzene	<0.12		0.12	0.014	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Hexachlorobutadiene	<0.30		0.30	0.093	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Hexachlorocyclopentadiene	<1.2		1.2	0.34	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Hexachloroethane	<0.30		0.30	0.090	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1

Euofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B32**

**Lab Sample ID: 500-223815-2**

Date Collected: 10/13/22 09:45

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.55</b>	<b>*3 **</b>	0.059	0.015	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Isophorone	<0.30		0.30	0.067	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Naphthalene</b>	<b>0.011</b>	<b>J</b>	0.059	0.0091	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Nitrobenzene	<0.059		0.059	0.015	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
N-Nitrosodi-n-propylamine	<0.12		0.12	0.072	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
N-Nitrosodiphenylamine	<0.30		0.30	0.070	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Pentachlorophenol	<1.2		1.2	0.95	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Phenanthrene</b>	<b>0.50</b>		0.059	0.0083	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Phenol	<0.30		0.30	0.13	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
<b>Pyrene</b>	<b>2.2</b>		0.059	0.012	mg/Kg	☼	10/24/22 13:25	10/28/22 18:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	101		31 - 143				10/24/22 13:25	10/28/22 18:07	1
2-Fluorobiphenyl	91		43 - 145				10/24/22 13:25	10/28/22 18:07	1
2-Fluorophenol	127		31 - 166				10/24/22 13:25	10/28/22 18:07	1
Nitrobenzene-d5 (Surr)	74		37 - 147				10/24/22 13:25	10/28/22 18:07	1
Phenol-d5	127		30 - 153				10/24/22 13:25	10/28/22 18:07	1
Terphenyl-d14 (Surr)	183	S1+	42 - 157				10/24/22 13:25	10/28/22 18:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.41</b>	<b>J B</b>	1.2	0.22	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Arsenic</b>	<b>11</b>		0.58	0.20	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Barium</b>	<b>62</b>		0.58	0.066	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Beryllium</b>	<b>0.93</b>	<b>B</b>	0.23	0.054	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Boron</b>	<b>7.9</b>	<b>B</b>	2.9	0.27	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Cadmium</b>	<b>0.35</b>	<b>B</b>	0.12	0.021	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Calcium</b>	<b>47000</b>		58	9.8	mg/Kg	☼	10/26/22 09:56	10/28/22 12:58	5
<b>Chromium</b>	<b>16</b>		0.58	0.28	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Cobalt</b>	<b>12</b>		0.29	0.075	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Copper</b>	<b>43</b>		0.58	0.16	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Iron</b>	<b>22000</b>	<b>B</b>	12	6.0	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Lead</b>	<b>85</b>		0.29	0.13	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Magnesium</b>	<b>24000</b>		5.8	2.9	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Manganese</b>	<b>360</b>		0.58	0.083	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Nickel</b>	<b>31</b>		0.58	0.17	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Potassium</b>	<b>1700</b>		29	10	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Silver</b>	<b>0.33</b>		0.29	0.074	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Sodium</b>	<b>850</b>		58	8.5	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Thallium</b>	<b>0.65</b>		0.58	0.29	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Vanadium</b>	<b>21</b>		0.29	0.068	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1
<b>Zinc</b>	<b>110</b>		1.2	0.51	mg/Kg	☼	10/26/22 09:56	10/27/22 20:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/24/22 08:31	10/27/22 20:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/24/22 08:31	10/27/22 20:39	1
Chromium	<0.025		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 20:39	1
Iron	<0.40		0.40	0.20	mg/L		10/24/22 08:31	10/27/22 20:39	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B32**

**Lab Sample ID: 500-223815-2**

Date Collected: 10/13/22 09:45

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.014		0.0075	0.0075	mg/L		10/24/22 08:31	10/27/22 20:39	1
Manganese	0.62		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 20:39	1
Nickel	<0.025		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 20:39	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.056		0.050	0.010	mg/L		10/24/22 08:35	10/25/22 23:40	1
Barium	0.36	J	0.50	0.050	mg/L		10/24/22 08:35	10/25/22 23:40	1
Beryllium	0.0062		0.0040	0.0040	mg/L		10/24/22 08:35	10/26/22 17:58	1
Boron	0.094	J	0.10	0.050	mg/L		10/24/22 08:35	10/25/22 23:40	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/24/22 08:35	10/25/22 23:40	1
Calcium	19		2.5	0.50	mg/L		10/24/22 08:35	10/25/22 23:40	1
Chromium	0.12		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 17:58	1
Cobalt	0.028		0.025	0.010	mg/L		10/24/22 08:35	10/25/22 23:40	1
Iron	120		0.40	0.20	mg/L		10/24/22 08:35	10/26/22 17:58	1
Lead	0.36		0.0075	0.0075	mg/L		10/24/22 08:35	10/25/22 23:40	1
Manganese	0.65		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 17:58	1
Nickel	0.14		0.025	0.010	mg/L		10/24/22 08:35	10/25/22 23:40	1
Potassium	19		2.5	0.50	mg/L		10/24/22 08:35	10/25/22 23:40	1
Selenium	<0.050		0.050	0.020	mg/L		10/24/22 08:35	10/26/22 17:58	1
Silver	<0.025		0.025	0.010	mg/L		10/24/22 08:35	10/25/22 23:40	1
Zinc	0.76		0.50	0.020	mg/L		10/24/22 08:35	10/25/22 23:40	1

**Method: SW846 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		10/24/22 08:31	10/27/22 17:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/24/22 08:35	10/26/22 21:55	1
Thallium	0.0046		0.0020	0.0020	mg/L		10/24/22 08:35	10/26/22 21:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/27/22 11:15	10/28/22 13:25	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.064		0.020	0.0065	mg/Kg	✱	10/26/22 07:45	10/26/22 14:35	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.27	J	0.59	0.23	mg/Kg	✱	10/27/22 16:00	10/27/22 16:53	1
pH (SW846 9045D)	8.5		0.2	0.2	SU			10/20/22 15:41	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*3	ISTD response or retention time outside acceptable limits.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### Metals

Qualifier	Qualifier Description
^-	Continuing Calibration Verification (CCV) is outside acceptance limits, low biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

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

## Glossary

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

Eurofins Chicago



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

## Glossary (Continued)

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

## Laboratory: Eurofins Chicago

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

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

## Laboratory: Eurofins Canton

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

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



**CHAIN OF CUSTODY RECORD**

500-223815

<b>Client Contact</b>	500-223815 COC	Project Name <u>AEE-003A</u>	COC No <u>1</u> of <u>2</u>
Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	Lab <u>test America - Chicago</u> Address <u>2417 Bond Street</u> <u>University Park, IL 60484</u> Phone <u>708-534-5200</u> Contact <u>Dick Wright</u> email <u>richard.wright@testamericainc.com</u>	Project No <u>PTB/WO #1: 195-002/003A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other	Lab Job No  Sample Temp <u>28-73.0</u> <u>2.9-73.1</u>
<b>Special Instructions:</b> 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		<b>Analyses</b> SAMPLER: <u>K. Moore / S. Khodaei</u>	

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES												Matrix Key:	Comments	
					VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization			
1	62R60-B43	10/13/22	0925	S	X	X					X	X	X	X	X				
2	62R60-B32		0945																
3	62R60-B44		1000																
4	62R60-B33		1015																
5	62R60-B45		1025																
6	62R60-B45 DUP		1030																
7	62R60-B34		1045																
8	62R60-B46		1100																
9	62R60-B35		1110																
10	62R60-B35 DUP	↓	1115	↓	↓	↓					↓	↓	↓	↓	↓				
11	Trip Blank #3				X														

Relinquished by <u>Azad Khodaei</u>	Date/Time <u>10/14/22 0940</u>	Received by <u>[Signature]</u>	Date/Time <u>10/14/22 0940</u>
Relinquished by <u>[Signature]</u>	Date/Time <u>10/14/22 1100</u>	Received by <u>[Signature]</u>	Date/Time <u>10/14/22 1100</u>
Relinquished by	Date/Time	Received by	Date/Time





# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

1469-1599 Irving Park Road and 400-402 Baker Drive (north side of Irving Park Road between Hillcrest Avenue & Baker Drive)

City: Itasca State: IL Zip Code: 60143

County: DuPage Township: Bloomington

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

Latitude: 41.97432 Longitude: -88.03895  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

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

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

Estimated Volume of debris (cu. Yd.): 200

### II. Owner/Operator Information for Source Site

Site Owner

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

Site Operator

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

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

Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATIONS 62R60-B34, 62R60-B37 AND 62R60-B38 WERE SAMPLED ADJACENT TO SITES 4386-60 AND 4386-62. SEE TABLE 3u AND FIGURES 10 AND 11 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORT- EUROFINS JOB ID NUMBER: 500-223815.

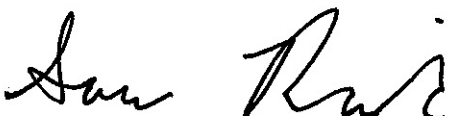
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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

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

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

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



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

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

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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***

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

ISGS Site 4386-60  
Residential Buildings

Sample ID	62R60-B34	62R60-B37	62R60-B38	Maximum Allowable Concentration				
Sample Depth (ft)	0-2	0-2	0-2	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area
Sample Date	10/13/2022	10/13/2022	10/13/2022					
PID	0	0	0					
Sample pH	8.3	8.2	8.3					
Matrix	Soil	Soil	Soil					
No Contaminants of Concern Noted.								

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223815-1  
Client Project/Site: IDOT - AE8-003  
Revision: 1

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

Attn: Ms. Colleen Grey

*Jodie Bracken*

Authorized for release by:

11/10/2022 5:20:22 PM

Jodie Bracken, Project Management Assistant II

[Jodie.Bracken@et.eurofinsus.com](mailto:Jodie.Bracken@et.eurofinsus.com)

Designee for

Richard Wright, Senior Project Manager

(708)746-0045

[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the {0} Project Manager.

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B34**

**Lab Sample ID: 500-223815-7**

**Date Collected: 10/13/22 10:45**

**Matrix: Solid**

**Date Received: 10/14/22 11:00**

**Percent Solids: 83.7**

**Method: SW846 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	☼	10/14/22 20:12	10/23/22 15:42	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00064	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00086	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00071	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Acetone	<0.020		0.020	0.0088	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Bromoform	<0.0020		0.0020	0.00059	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Chlorobenzene	<0.0020		0.0020	0.00074	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Chloroform	<0.0020		0.0020	0.00070	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00061	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Dibromochloromethane	<0.0020		0.0020	0.00066	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Ethylbenzene	<0.0020		0.0020	0.00096	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Styrene	<0.0020		0.0020	0.00061	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00071	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	10/14/22 20:12	10/23/22 15:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 134	10/14/22 20:12	10/23/22 15:42	1
4-Bromofluorobenzene (Surr)	76		75 - 131	10/14/22 20:12	10/23/22 15:42	1
Dibromofluoromethane	120		75 - 126	10/14/22 20:12	10/23/22 15:42	1
Toluene-d8 (Surr)	115		75 - 124	10/14/22 20:12	10/23/22 15:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	10/24/22 13:25	11/01/22 14:55	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	10/24/22 13:25	11/01/22 14:55	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	10/24/22 13:25	11/01/22 14:55	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	10/24/22 13:25	11/01/22 14:55	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	10/24/22 13:25	11/01/22 14:55	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B34**

**Lab Sample ID: 500-223815-7**

**Date Collected: 10/13/22 10:45**

**Matrix: Solid**

**Date Received: 10/14/22 11:00**

**Percent Solids: 83.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
<b>2-Methylnaphthalene</b>	<b>0.0088</b>	<b>J</b>	0.078	0.0071	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
<b>Anthracene</b>	<b>0.015</b>	<b>J</b>	0.038	0.0064	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
<b>Benzo[a]anthracene</b>	<b>0.021</b>	<b>J</b>	0.038	0.0052	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
<b>Benzo[a]pyrene</b>	<b>0.041</b>		0.038	0.0074	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
<b>Benzo[b]fluoranthene</b>	<b>0.066</b>		0.038	0.0083	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
<b>Benzo[g,h,i]perylene</b>	<b>0.026</b>	<b>J**</b>	0.038	0.012	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
<b>Benzo[k]fluoranthene</b>	<b>0.023</b>	<b>J</b>	0.038	0.011	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
<b>Bis(2-ethylhexyl) phthalate</b>	<b>0.077</b>	<b>J</b>	0.19	0.070	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
Carbazole	<0.19		0.19	0.096	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
<b>Chrysene</b>	<b>0.041</b>		0.038	0.010	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
<b>Dibenz(a,h)anthracene</b>	<b>0.0087</b>	<b>J</b>	0.038	0.0074	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
<b>Dibenzofuran</b>	<b>0.065</b>	<b>J</b>	0.19	0.045	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
<b>Di-n-butyl phthalate</b>	<b>0.072</b>	<b>J</b>	0.19	0.059	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
<b>Fluoranthene</b>	<b>0.061</b>		0.038	0.0071	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☆	10/24/22 13:25	11/01/22 14:55	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B34**

**Lab Sample ID: 500-223815-7**

Date Collected: 10/13/22 10:45

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.024</b>	<b>J**</b>	0.038	0.010	mg/Kg	☼	10/24/22 13:25	11/01/22 14:55	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	10/24/22 13:25	11/01/22 14:55	1
<b>Naphthalene</b>	<b>0.022</b>	<b>J</b>	0.038	0.0059	mg/Kg	☼	10/24/22 13:25	11/01/22 14:55	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	10/24/22 13:25	11/01/22 14:55	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	☼	10/24/22 13:25	11/01/22 14:55	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	10/24/22 13:25	11/01/22 14:55	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	10/24/22 13:25	11/01/22 14:55	1
<b>Phenanthrene</b>	<b>0.027</b>	<b>J</b>	0.038	0.0054	mg/Kg	☼	10/24/22 13:25	11/01/22 14:55	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	10/24/22 13:25	11/01/22 14:55	1
<b>Pyrene</b>	<b>0.059</b>		0.038	0.0076	mg/Kg	☼	10/24/22 13:25	11/01/22 14:55	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2,4,6-Tribromophenol	101		31 - 143				10/24/22 13:25	11/01/22 14:55	1
2-Fluorobiphenyl	81		43 - 145				10/24/22 13:25	11/01/22 14:55	1
2-Fluorophenol	94		31 - 166				10/24/22 13:25	11/01/22 14:55	1
Nitrobenzene-d5 (Surr)	54		37 - 147				10/24/22 13:25	11/01/22 14:55	1
Phenol-d5	95		30 - 153				10/24/22 13:25	11/01/22 14:55	1
Terphenyl-d14 (Surr)	140		42 - 157				10/24/22 13:25	11/01/22 14:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Arsenic</b>	<b>6.9</b>		0.60	0.20	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Barium</b>	<b>100</b>		0.60	0.068	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Beryllium</b>	<b>0.94</b>	<b>B</b>	0.24	0.056	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Boron</b>	<b>6.5</b>	<b>B</b>	3.0	0.28	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Cadmium</b>	<b>0.30</b>	<b>B</b>	0.12	0.021	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Calcium</b>	<b>15000</b>		12	2.0	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Chromium</b>	<b>19</b>		0.60	0.30	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Cobalt</b>	<b>9.4</b>		0.30	0.078	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Copper</b>	<b>23</b>		0.60	0.17	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Iron</b>	<b>19000</b>	<b>B</b>	12	6.2	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Lead</b>	<b>28</b>		0.30	0.14	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Magnesium</b>	<b>9400</b>		6.0	3.0	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Manganese</b>	<b>350</b>		0.60	0.086	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Nickel</b>	<b>35</b>		0.60	0.17	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Potassium</b>	<b>1900</b>		30	11	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
Selenium	<0.60		0.60	0.35	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Silver</b>	<b>0.40</b>		0.30	0.077	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Sodium</b>	<b>770</b>		60	8.8	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Thallium</b>	<b>0.52</b>	<b>J</b>	0.60	0.30	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Vanadium</b>	<b>25</b>		0.30	0.070	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1
<b>Zinc</b>	<b>74</b>		1.2	0.52	mg/Kg	☼	10/26/22 09:56	10/27/22 21:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/24/22 08:31	10/27/22 20:56	1
Chromium	<0.025		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 20:56	1
Iron	<0.40		0.40	0.20	mg/L		10/24/22 08:31	10/27/22 20:56	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/24/22 08:31	10/27/22 20:56	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B34**

**Lab Sample ID: 500-223815-7**

Date Collected: 10/13/22 10:45

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.42		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 20:56	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.038	J	0.050	0.010	mg/L		10/24/22 08:35	10/26/22 00:03	1
Barium	0.54		0.50	0.050	mg/L		10/24/22 08:35	10/26/22 00:03	1
Beryllium	0.0062		0.0040	0.0040	mg/L		10/24/22 08:35	10/26/22 18:14	1
Boron	0.091	J	0.10	0.050	mg/L		10/24/22 08:35	10/26/22 00:03	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/24/22 08:35	10/26/22 00:03	1
Calcium	24		2.5	0.50	mg/L		10/24/22 08:35	10/26/22 00:03	1
Chromium	0.12		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:03	1
Cobalt	0.023	J	0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:03	1
Iron	120		0.40	0.20	mg/L		10/24/22 08:35	10/26/22 18:14	1
Lead	0.060		0.0075	0.0075	mg/L		10/24/22 08:35	10/26/22 00:03	1
Manganese	0.52		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 18:14	1
Nickel	0.098		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:03	1
Potassium	21		2.5	0.50	mg/L		10/24/22 08:35	10/26/22 00:03	1
Selenium	<0.050		0.050	0.020	mg/L		10/24/22 08:35	10/26/22 18:14	1
Silver	<0.025		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:03	1
Zinc	0.32	J	0.50	0.020	mg/L		10/24/22 08:35	10/26/22 00:03	1

**Method: SW846 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		10/24/22 08:31	10/27/22 17:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/24/22 08:35	10/26/22 22:12	1
Thallium	0.0028		0.0020	0.0020	mg/L		10/24/22 08:35	10/26/22 22:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/27/22 11:15	10/28/22 13:40	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.056		0.018	0.0061	mg/Kg	☆	10/26/22 07:45	10/26/22 14:49	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.29	J	0.60	0.23	mg/Kg	☆	10/27/22 16:00	10/27/22 17:01	1
pH (SW846 9045D)	8.3		0.2	0.2	SU			10/20/22 15:49	1



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B38**

**Lab Sample ID: 500-223815-16**

**Date Collected: 10/13/22 12:30**

**Matrix: Solid**

**Date Received: 10/14/22 11:00**

**Percent Solids: 87.0**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☆	10/14/22 20:12	10/23/22 19:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 134	10/14/22 20:12	10/23/22 19:11	1
4-Bromofluorobenzene (Surr)	108		75 - 131	10/14/22 20:12	10/23/22 19:11	1
Dibromofluoromethane	109		75 - 126	10/14/22 20:12	10/23/22 19:11	1
Toluene-d8 (Surr)	119		75 - 124	10/14/22 20:12	10/23/22 19:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☆	10/24/22 13:25	10/31/22 15:53	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☆	10/24/22 13:25	10/31/22 15:53	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☆	10/24/22 13:25	10/31/22 15:53	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☆	10/24/22 13:25	10/31/22 15:53	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☆	10/24/22 13:25	10/31/22 15:53	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B38**

**Lab Sample ID: 500-223815-16**

Date Collected: 10/13/22 12:30

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
<b>2-Methylnaphthalene</b>	<b>0.0090</b>	<b>J</b>	0.073	0.0067	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
<b>Acenaphthylene</b>	<b>0.0076</b>	<b>J</b>	0.036	0.0048	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
<b>Anthracene</b>	<b>0.011</b>	<b>J</b>	0.036	0.0061	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
<b>Benzo[a]anthracene</b>	<b>0.059</b>		0.036	0.0049	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
<b>Benzo[a]pyrene</b>	<b>0.077</b>	<b>*3</b>	0.036	0.0070	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
<b>Benzo[b]fluoranthene</b>	<b>0.14</b>	<b>*3</b>	0.036	0.0078	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
<b>Benzo[g,h,i]perylene</b>	<b>0.047</b>	<b>*3 *+</b>	0.036	0.012	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
<b>Benzo[k]fluoranthene</b>	<b>0.034</b>	<b>J *3</b>	0.036	0.011	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
<b>Chrysene</b>	<b>0.10</b>		0.036	0.0099	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
<b>Dibenz(a,h)anthracene</b>	<b>0.013</b>	<b>J *3</b>	0.036	0.0070	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
<b>Fluoranthene</b>	<b>0.10</b>		0.036	0.0067	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1

Euofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B38**

**Lab Sample ID: 500-223815-16**

Date Collected: 10/13/22 12:30

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.040</b>	<b>*3 **</b>	0.036	0.0094	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
<b>Phenanthrene</b>	<b>0.059</b>		0.036	0.0051	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
<b>Pyrene</b>	<b>0.098</b>		0.036	0.0072	mg/Kg	☼	10/24/22 13:25	10/31/22 15:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	111		31 - 143				10/24/22 13:25	10/31/22 15:53	1
2-Fluorobiphenyl	120		43 - 145				10/24/22 13:25	10/31/22 15:53	1
2-Fluorophenol	128		31 - 166				10/24/22 13:25	10/31/22 15:53	1
Nitrobenzene-d5 (Surr)	115		37 - 147				10/24/22 13:25	10/31/22 15:53	1
Phenol-d5	112		30 - 153				10/24/22 13:25	10/31/22 15:53	1
Terphenyl-d14 (Surr)	159	S1+	42 - 157				10/24/22 13:25	10/31/22 15:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.39</b>	<b>J B</b>	1.1	0.21	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Arsenic</b>	<b>9.2</b>		0.54	0.18	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Barium</b>	<b>60</b>		0.54	0.062	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Beryllium</b>	<b>0.92</b>	<b>B</b>	0.22	0.050	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Boron</b>	<b>11</b>	<b>B</b>	2.7	0.25	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Cadmium</b>	<b>0.28</b>	<b>B</b>	0.11	0.019	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Calcium</b>	<b>44000</b>		54	9.1	mg/Kg	☼	10/26/22 09:56	10/28/22 13:39	5
<b>Chromium</b>	<b>17</b>		0.54	0.27	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Cobalt</b>	<b>13</b>		0.27	0.071	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Copper</b>	<b>28</b>		0.54	0.15	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Iron</b>	<b>20000</b>	<b>B</b>	11	5.6	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Lead</b>	<b>59</b>		0.27	0.12	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Magnesium</b>	<b>21000</b>		5.4	2.7	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Manganese</b>	<b>380</b>		0.54	0.078	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Nickel</b>	<b>30</b>		0.54	0.16	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Potassium</b>	<b>2400</b>		27	9.5	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
Selenium	<0.54		0.54	0.32	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Silver</b>	<b>0.32</b>		0.27	0.070	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Sodium</b>	<b>710</b>		54	8.0	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Thallium</b>	<b>0.59</b>		0.54	0.27	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Vanadium</b>	<b>22</b>		0.27	0.064	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1
<b>Zinc</b>	<b>70</b>		1.1	0.47	mg/Kg	☼	10/26/22 09:56	10/27/22 21:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.010</b>	<b>J</b>	0.050	0.010	mg/L		10/24/22 08:31	10/27/22 21:29	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/24/22 08:31	10/27/22 21:29	1
Chromium	<0.025		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 21:29	1
Iron	<0.40		0.40	0.20	mg/L		10/24/22 08:31	10/27/22 21:29	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B38**

**Lab Sample ID: 500-223815-16**

Date Collected: 10/13/22 12:30

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 87.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0079		0.0075	0.0075	mg/L		10/24/22 08:31	10/27/22 21:29	1
Manganese	0.44		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 21:29	1
Nickel	0.012	J	0.025	0.010	mg/L		10/24/22 08:31	10/27/22 21:29	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.055		0.050	0.010	mg/L		10/24/22 08:35	10/26/22 00:35	1
Barium	0.39	J	0.50	0.050	mg/L		10/24/22 08:35	10/26/22 00:35	1
Beryllium	0.0067		0.0040	0.0040	mg/L		10/24/22 08:35	10/26/22 18:45	1
Boron	0.13		0.10	0.050	mg/L		10/24/22 08:35	10/26/22 00:35	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/24/22 08:35	10/26/22 00:35	1
Calcium	26		2.5	0.50	mg/L		10/24/22 08:35	10/26/22 00:35	1
Chromium	0.12		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:35	1
Cobalt	0.032		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:35	1
Iron	120		0.40	0.20	mg/L		10/24/22 08:35	10/26/22 00:35	1
Lead	0.15		0.0075	0.0075	mg/L		10/24/22 08:35	10/26/22 00:35	1
Manganese	0.51		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 18:45	1
Nickel	0.13		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:35	1
Potassium	25		2.5	0.50	mg/L		10/24/22 08:35	10/26/22 00:35	1
Selenium	<0.050		0.050	0.020	mg/L		10/24/22 08:35	10/26/22 00:35	1
Silver	<0.025		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:35	1
Zinc	0.36	J	0.50	0.020	mg/L		10/24/22 08:35	10/26/22 00:35	1

**Method: SW846 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		10/24/22 08:31	10/27/22 18:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/24/22 08:35	10/26/22 22:46	1
Thallium	0.0035		0.0020	0.0020	mg/L		10/24/22 08:35	10/26/22 22:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/27/22 11:15	10/28/22 14:01	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.047		0.017	0.0058	mg/Kg	✱	10/26/22 07:45	10/26/22 15:05	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.55		0.55	0.21	mg/Kg	✱	10/27/22 16:36	10/27/22 17:57	1
pH (SW846 9045D)	8.3		0.2	0.2	SU			10/20/22 13:45	1

Eurolins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B37**

**Lab Sample ID: 500-223815-17**

**Date Collected: 10/13/22 12:45**

**Matrix: Solid**

**Date Received: 10/14/22 11:00**

**Percent Solids: 87.9**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Acetone	<0.016		0.016	0.0070	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	☼	10/14/22 20:12	10/23/22 19:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 134	10/14/22 20:12	10/23/22 19:35	1
4-Bromofluorobenzene (Surr)	91		75 - 131	10/14/22 20:12	10/23/22 19:35	1
Dibromofluoromethane	109		75 - 126	10/14/22 20:12	10/23/22 19:35	1
Toluene-d8 (Surr)	110		75 - 124	10/14/22 20:12	10/23/22 19:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B37**

**Lab Sample ID: 500-223815-17**

**Date Collected: 10/13/22 12:45**

**Matrix: Solid**

**Date Received: 10/14/22 11:09**

**Percent Solids: 87.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
2,4-Dichlorophenol	<0.35		0.35	0.085	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
2,4-Dimethylphenol	<0.35		0.35	0.14	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
2-Methylnaphthalene	<0.072		0.072	0.0066	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
2-Nitrophenol	<0.35		0.35	0.084	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
3,3'-Dichlorobenzidine	<0.18	*3	0.18	0.050	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Anthracene	<0.035		0.035	0.0060	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Benzo[a]anthracene	<0.035	*3	0.035	0.0048	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Benzo[a]pyrene	<0.035	*3	0.035	0.0069	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Benzo[b]fluoranthene	<0.035	*3	0.035	0.0077	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Benzo[g,h,i]perylene	<0.035	*+ *3	0.035	0.011	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Benzo[k]fluoranthene	<0.035	*3	0.035	0.010	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Bis(2-ethylhexyl) phthalate	<0.18	*3	0.18	0.065	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Butyl benzyl phthalate	<0.18	*3	0.18	0.068	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Chrysene	<0.035	*3	0.035	0.0097	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Dibenz(a,h)anthracene	<0.035	*3	0.035	0.0069	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Fluoranthene	<0.035		0.035	0.0066	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Hexachlorocyclopentadiene	<0.72		0.72	0.20	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B37**

**Lab Sample ID: 500-223815-17**

Date Collected: 10/13/22 12:45

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.035	*+ *3	0.035	0.0092	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Phenanthrene	<0.035		0.035	0.0050	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
Phenol	<0.18		0.18	0.079	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1
<b>Pyrene</b>	<b>0.0083</b>	<b>J *3</b>	0.035	0.0071	mg/Kg	☼	10/24/22 13:25	10/28/22 21:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	100		31 - 143	10/24/22 13:25	10/28/22 21:11	1
2-Fluorobiphenyl	107		43 - 145	10/24/22 13:25	10/28/22 21:11	1
2-Fluorophenol	123		31 - 166	10/24/22 13:25	10/28/22 21:11	1
Nitrobenzene-d5 (Surr)	90		37 - 147	10/24/22 13:25	10/28/22 21:11	1
Phenol-d5	136		30 - 153	10/24/22 13:25	10/28/22 21:11	1
Terphenyl-d14 (Surr)	220	S1+ *3	42 - 157	10/24/22 13:25	10/28/22 21:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Arsenic</b>	<b>8.0</b>		0.57	0.19	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Barium</b>	<b>46</b>		0.57	0.064	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Beryllium</b>	<b>0.90</b>	<b>B</b>	0.23	0.053	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Boron</b>	<b>13</b>	<b>B</b>	2.8	0.26	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Cadmium</b>	<b>0.30</b>	<b>B</b>	0.11	0.020	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Calcium</b>	<b>54000</b>		57	9.6	mg/Kg	☼	10/26/22 09:56	10/28/22 13:42	5
<b>Chromium</b>	<b>17</b>		0.57	0.28	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Cobalt</b>	<b>13</b>		0.28	0.074	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Copper</b>	<b>26</b>		0.57	0.16	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Iron</b>	<b>19000</b>	<b>B</b>	11	5.9	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Lead</b>	<b>41</b>		0.28	0.13	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Magnesium</b>	<b>23000</b>		5.7	2.8	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Manganese</b>	<b>380</b>		0.57	0.082	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Nickel</b>	<b>33</b>		0.57	0.16	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Potassium</b>	<b>2700</b>		28	10	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
Selenium	<0.57		0.57	0.33	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Silver</b>	<b>0.31</b>		0.28	0.073	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Sodium</b>	<b>1100</b>		57	8.4	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Thallium</b>	<b>0.48</b>	<b>J</b>	0.57	0.28	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Vanadium</b>	<b>20</b>		0.28	0.067	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1
<b>Zinc</b>	<b>70</b>		1.1	0.50	mg/Kg	☼	10/26/22 09:56	10/27/22 21:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		10/24/22 08:31	10/27/22 21:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/24/22 08:31	10/27/22 21:59	1
Chromium	<0.025		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 21:59	1
Iron	<0.40		0.40	0.20	mg/L		10/24/22 08:31	10/27/22 21:59	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B37**

**Lab Sample ID: 500-223815-17**

Date Collected: 10/13/22 12:45

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.013		0.0075	0.0075	mg/L		10/24/22 08:31	10/28/22 12:15	1
Manganese	3.9		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 21:59	1
Nickel	0.057		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 21:59	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.10		0.050	0.010	mg/L		10/24/22 08:35	10/26/22 00:38	1
Barium	0.60		0.50	0.050	mg/L		10/24/22 08:35	10/26/22 00:38	1
Beryllium	0.011		0.0040	0.0040	mg/L		10/24/22 08:35	10/26/22 18:48	1
Boron	0.21		0.10	0.050	mg/L		10/24/22 08:35	10/26/22 00:38	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/24/22 08:35	10/26/22 00:38	1
Calcium	65		2.5	0.50	mg/L		10/24/22 08:35	10/26/22 00:38	1
Chromium	0.19		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:38	1
Cobalt	0.057		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:38	1
Iron	210		0.40	0.20	mg/L		10/24/22 08:35	10/26/22 00:38	1
Lead	0.27		0.0075	0.0075	mg/L		10/24/22 08:35	10/26/22 00:38	1
Manganese	0.85		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 18:48	1
Nickel	0.26		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:38	1
Potassium	39		2.5	0.50	mg/L		10/24/22 08:35	10/26/22 00:38	1
Selenium	<0.050		0.050	0.020	mg/L		10/24/22 08:35	10/26/22 00:38	1
Silver	<0.025		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:38	1
Zinc	0.57		0.50	0.020	mg/L		10/24/22 08:35	10/26/22 00:38	1

**Method: SW846 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		10/24/22 08:31	10/27/22 18:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/24/22 08:35	10/26/22 22:49	1
Thallium	0.0044		0.0020	0.0020	mg/L		10/24/22 08:35	10/26/22 22:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/27/22 11:15	10/28/22 14:03	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.038		0.018	0.0061	mg/Kg	✱	10/26/22 07:45	10/26/22 15:11	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.57		0.57	0.22	mg/Kg	✱	10/27/22 16:36	10/27/22 19:00	1
pH (SW846 9045D)	8.2		0.2	0.2	SU			10/20/22 16:11	1

Euofins Chicago



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*3	ISTD response or retention time outside acceptable limits.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### Metals

Qualifier	Qualifier Description
^-	Continuing Calibration Verification (CCV) is outside acceptance limits, low biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

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

## Glossary

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

Eurofins Chicago

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

## Laboratory: Eurofins Chicago

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

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

## Laboratory: Eurofins Canton

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

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



**CHAIN OF CUSTODY RECORD**

500-223815

<b>Client Contact</b>	500-223815 COC	Project Name <u>AEE-003A</u>	COC No <u>1</u> of <u>2</u>
Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	Lab <u>Test America - Chicago</u> Address <u>2417 Bond Street</u> <u>University Park, IL 60484</u> Phone <u>708-534-5200</u> Contact <u>Dick Wright</u> email <u>richard.wright@testamericainc.com</u>	Project No <u>PTB/WO #1: 195-002/003A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other	Lab Job No  Sample Temp <u>28-73.0</u> <u>29-73.1</u>
<b>Special Instructions:</b> 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		<b>Analyses</b> SAMPLER: <u>K. Moore / S. Khodaei</u>	

- 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												Comments		
					VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization			
1	62R60-B43	10/13/22	0925	S	X	X						X	X	X	X	X			
2	62R60-B32		0945																
3	62R60-B44		1000																
4	62R60-B33		1015																
5	62R60-B45		1025																
6	62R60-B45 DUP		1030																
7	62R60-B34		1045																
8	62R60-B46		1100																
9	62R60-B35		1110																
10	62R60-B35 DUP	↓	1115	↓	↓	↓						↓	↓	↓	↓	↓			
11	Trip Blank #3				X														

Relinquished by <u>Azad Khodaei</u>	Date/Time <u>10/14/22 0940</u>	Received by <u>[Signature]</u>	Date/Time <u>10/14/22 0940</u>
Relinquished by <u>[Signature]</u>	Date/Time <u>10/14/22 1100</u>	Received by <u>[Signature]</u>	Date/Time <u>10/14/22 1100</u>
Relinquished by	Date/Time	Received by	Date/Time

# CHAIN OF CUSTODY RECORD

500-223815

<b>Client Contact</b> Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	<b>Laboratory</b> Lab Test America - Chicago Address 2417 Bond Street University Park, IL 60484 Phone 708-534-5200 Contact Dick Wright email richard.wright@testamericainc.com	Project Name <u>AE8-003A</u> Project No <u>PTB/WO #: 195-002/003A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>K. Moore / S. Khodaei</u>	COC No <u>2</u> of <u>2</u> Lab Job No : Sample Temp
--	--	--	--

**Special Instructions:**  
See Table 2 for complete parameter lists and minimum reporting limits  
\* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal  
\*\* If SPLP result exceeds Class I Standard, run TCLP for that specific parameter  
\*\*\* If total cyanide exceeds MAC, run ASTM D3987 (Neutral Leach) cyanide

ANALYSES																
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization
12	62R60-B 47	10/13/22	1130	S	X	X					X	X	X	X	X	
13	62R60-B 48		1145													
14	62R60-B 49		1200													
15	62R60-B 39		1215													
16	62R60-B 38		1230													
17	62R60-B 37		1245													
18	62R60-B 36	↓	1300	↓	↓	↓					↓	↓	↓	↓	↓	

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

					ANALYSES											Comments	

Relinquished by <u>Seied Khodaei</u>	Date/Time <u>10/14/22 0940</u>	Received by <u>[Signature]</u>	Date/Time <u>10/14/22 0940</u>
Relinquished by <u>[Signature]</u>	Date/Time <u>10/14/22 1100</u>	Received by <u>[Signature]</u>	Date/Time <u>10/14/22 1100</u>
Relinquished by	Date/Time	Received by	Date/Time

**Eurofins Chicago**

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

**Chain of Custody Record**



Environment Testing  
 America

<b>Client Information (Sub Contract Lab)</b>				Sampler:	Lab PM: Wright, Richard	Carrier Tracking No(s):	COC No: 500-166584.1	
Client Contact: Shipping/Receiving				Phone:	E-Mail: Richard.Wright@et.eurofinsus.com	State of Origin: Illinois	Page: Page 1 of 2	
Company: Eurofins Environment Testing North Cent				Accreditations Required (See note): NELAP - Illinois			Job #: 500-223815-1	
Address: 180 S. Van Buren Avenue, City: Barberton State, Zip: OH, 44203 Phone: 330-497-9396(Tel) 330-497-0772(Fax) Email:		Due Date Requested: 10/27/2022 TAT Requested (days):		<b>Analysis Requested</b>				<b>Preservation Codes:</b> A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - pH 4-5 L - EDA Y - Trizma Z - other (specify)
Project Name: IDOT - AE8-003 Site:		Project #: 50020681 SSOW#:						
PO #:		WO #:						
Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)						
<b>Sample Identification - Client ID (Lab ID)</b>				Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	
				Preservation Code:				<b>Special Instructions/Note:</b>  <i>ESU</i>
62R60-B43 (500-223815-1)				10/13/22	09:25 Central	Solid	Solid	
62R60-B32 (500-223815-2)				10/13/22	09:45 Central	Solid	Solid	
62R60-B44 (500-223815-3)				10/13/22	10:00 Central	Solid	Solid	
62R60-B33 (500-223815-4)				10/13/22	10:15 Central	Solid	Solid	
62R60-B45 (500-223815-5)				10/13/22	10:25 Central	Solid	Solid	
62R60-B45 DUP (500-223815-6)				10/13/22	10:30 Central	Solid	Solid	
62R60-B34 (500-223815-7)				10/13/22	10:45 Central	Solid	Solid	
62R60-B46 (500-223815-8)				10/13/22	11:00 Central	Solid	Solid	
62R60-B35 (500-223815-9)				10/13/22	11:10 Central	Solid	Solid	

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

<b>Possible Hazard Identification</b>				<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b>			
Unconfirmed				<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested: I, II, III, IV, Other (specify)		Primary Deliverable Rank: 1		Special Instructions/QC Requirements:			
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: <i>[Signature]</i>		Date/Time: 10/24/22 17:00		Company:		Received by: <i>[Signature]</i>	
Relinquished by:		Date/Time:		Company:		Received by: <i>[Signature]</i>	
Relinquished by:		Date/Time:		Company:		Received by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:			

Page 151 of 154

11/10/2022 (Rev. 1)









# Illinois Environmental Protection Agency

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

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

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

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

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

### I. Source Location Information

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

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

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

21W161-21W360 & 1492 Irving Park Road (south side of Irving Park Road between Hillcrest Avenue & east of Andrene Lane)

City: Itasca State: IL Zip Code: 60143

County: DuPage Township: Bloomington

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

Latitude: 41.97438 Longitude: -88.03964  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

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

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

Estimated Volume of debris (cu. Yd.): 211

### II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

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

Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

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

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

LOCATIONS 62R60-B45 AND 62R60-B49 WERE SAMPLED ADJACENT TO SITE 4386-61. SEE TABLE 3v AND FIGURES 10 AND 11 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

EUROFINS ANALYTICAL REPORT- EUROFINS JOB ID NUMBER: 500-223815.

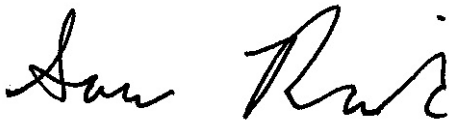
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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

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

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

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:





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

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

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

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

<b>Semivolatile Organic Compounds (mg/kg)</b>
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***

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

ISGS Site 4386-61  
Residences and Vacant  
Lot

Sample ID	62R60-B45	62R60-B45 DUP	62R60-B49	Maximum Allowable Concentration							
Sample Depth (ft)	0-2	0-2	0-2	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area			
Sample Date	10/13/2022	10/13/2022	10/13/2022								
PID	0	0	0								
Sample pH	7.7	8.4	8.1								
Matrix	Soil	Soil	Soil								
Semivolatile Organic Compounds (mg/kg)											
Benzo(a)pyrene	0.091	1,2	0.89	1,2	0.59	1,2	0.09	0.09	0.98	11.4	2.1
Benzo(b)fluoranthene	0.13		1.3	1,2,3	0.95	1,2,3	0.9	0.9	0.9	13.1	2.1
Dibenzo(a,h)anthracene	J 0.02		0.19	1,2,3	0.11	1,2	0.09	0.09	0.15	1.03	0.42

## ANALYTICAL REPORT

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

Laboratory Job ID: 500-223815-1  
Client Project/Site: IDOT - AE8-003  
Revision: 1

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

Attn: Ms. Colleen Grey

*Jodie Bracken*

Authorized for release by:

11/10/2022 5:20:22 PM

Jodie Bracken, Project Management Assistant II

[Jodie.Bracken@et.eurofinsus.com](mailto:Jodie.Bracken@et.eurofinsus.com)

Designee for

Richard Wright, Senior Project Manager

(708)746-0045

[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

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

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the {0} Project Manager.

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B45**

**Lab Sample ID: 500-223815-5**

Date Collected: 10/13/22 10:25

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 69.9

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0025		0.0025	0.00083	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
1,1,2,2-Tetrachloroethane	<0.0025		0.0025	0.00079	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
1,1,2-Trichloroethane	<0.0025		0.0025	0.0011	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
1,1-Dichloroethane	<0.0025		0.0025	0.00084	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
1,1-Dichloroethene	<0.0025		0.0025	0.00085	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
1,2-Dichloroethane	<0.0062		0.0062	0.0019	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
1,2-Dichloropropane	<0.0025		0.0025	0.00064	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
1,3-Dichloropropene, Total	<0.0025		0.0025	0.00087	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
2-Butanone (MEK)	<0.0062		0.0062	0.0027	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
2-Hexanone	<0.0062		0.0062	0.0019	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
4-Methyl-2-pentanone (MIBK)	<0.0062		0.0062	0.0018	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Acetone	<0.025		0.025	0.011	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Benzene	<0.0025		0.0025	0.00063	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Bromodichloromethane	<0.0025		0.0025	0.00050	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Bromoform	<0.0025		0.0025	0.00072	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Bromomethane	<0.0062		0.0062	0.0023	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Carbon disulfide	<0.0062		0.0062	0.0013	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Carbon tetrachloride	<0.0025		0.0025	0.00071	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Chlorobenzene	<0.0025		0.0025	0.00091	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Chloroethane	<0.0062		0.0062	0.0018	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Chloroform	<0.0025		0.0025	0.00086	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Chloromethane	<0.0062		0.0062	0.0025	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
cis-1,2-Dichloroethene	<0.0025		0.0025	0.00069	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
cis-1,3-Dichloropropene	<0.0025		0.0025	0.00074	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Dibromochloromethane	<0.0025		0.0025	0.00081	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Ethylbenzene	<0.0025		0.0025	0.0012	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Methyl tert-butyl ether	<0.0025		0.0025	0.00072	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Methylene Chloride	<0.0062		0.0062	0.0024	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Styrene	<0.0025		0.0025	0.00074	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Tetrachloroethene	<0.0025		0.0025	0.00084	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Toluene	<0.0025		0.0025	0.00062	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
trans-1,2-Dichloroethene	<0.0025		0.0025	0.0011	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
trans-1,3-Dichloropropene	<0.0025		0.0025	0.00087	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Trichloroethene	<0.0025		0.0025	0.00083	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Vinyl chloride	<0.0025		0.0025	0.0011	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1
Xylenes, Total	<0.0049		0.0049	0.00079	mg/Kg	☼	10/14/22 20:12	10/23/22 14:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 134	10/14/22 20:12	10/23/22 14:55	1
4-Bromofluorobenzene (Surr)	98		75 - 131	10/14/22 20:12	10/23/22 14:55	1
Dibromofluoromethane	113		75 - 126	10/14/22 20:12	10/23/22 14:55	1
Toluene-d8 (Surr)	113		75 - 124	10/14/22 20:12	10/23/22 14:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.35		0.35	0.075	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
1,2-Dichlorobenzene	<0.35		0.35	0.084	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
1,3-Dichlorobenzene	<0.35		0.35	0.079	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
1,4-Dichlorobenzene	<0.35		0.35	0.090	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
2,2'-oxybis[1-chloropropane]	<0.35		0.35	0.081	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B45**

**Lab Sample ID: 500-223815-5**

**Date Collected: 10/13/22 10:25**

**Matrix: Solid**

**Date Received: 10/14/22 11:00**

**Percent Solids: 69.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.69		0.69	0.16	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
2,4,6-Trichlorophenol	<0.69		0.69	0.24	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
2,4-Dichlorophenol	<0.69		0.69	0.17	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
2,4-Dimethylphenol	<0.69		0.69	0.27	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
2,4-Dinitrophenol	<1.4		1.4	1.2	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
2,4-Dinitrotoluene	<0.35		0.35	0.11	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
2,6-Dinitrotoluene	<0.35		0.35	0.14	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
2-Chloronaphthalene	<0.35		0.35	0.077	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
2-Chlorophenol	<0.35		0.35	0.12	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
2-Methylnaphthalene	<0.14		0.14	0.013	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
2-Methylphenol	<0.35		0.35	0.11	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
2-Nitroaniline	<0.35		0.35	0.094	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
2-Nitrophenol	<0.69		0.69	0.17	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
3 & 4 Methylphenol	<0.35		0.35	0.12	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
3,3'-Dichlorobenzidine	<0.35		0.35	0.098	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
3-Nitroaniline	<0.69		0.69	0.22	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
4,6-Dinitro-2-methylphenol	<1.4		1.4	0.56	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
4-Bromophenyl phenyl ether	<0.35		0.35	0.092	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
4-Chloro-3-methylphenol	<0.69		0.69	0.24	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
4-Chloroaniline	<1.4		1.4	0.33	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
4-Chlorophenyl phenyl ether	<0.35		0.35	0.082	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
4-Nitroaniline	<0.69		0.69	0.29	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
4-Nitrophenol	<1.4		1.4	0.66	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Acenaphthene	<0.069		0.069	0.013	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Acenaphthylene	<0.069		0.069	0.0092	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Anthracene	<0.069		0.069	0.012	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
<b>Benzo[a]anthracene</b>	<b>0.074</b>		0.069	0.0094	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
<b>Benzo[a]pyrene</b>	<b>0.091</b>		0.069	0.014	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
<b>Benzo[b]fluoranthene</b>	<b>0.13</b>		0.069	0.015	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
<b>Benzo[g,h,i]perylene</b>	<b>0.070</b> *		0.069	0.023	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
<b>Benzo[k]fluoranthene</b>	<b>0.049</b> J		0.069	0.021	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Bis(2-chloroethoxy)methane	<0.35		0.35	0.071	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Bis(2-chloroethyl)ether	<0.35		0.35	0.10	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Bis(2-ethylhexyl) phthalate	<0.35		0.35	0.13	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Butyl benzyl phthalate	<0.35		0.35	0.13	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Carbazole	<0.35		0.35	0.17	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
<b>Chrysene</b>	<b>0.10</b>		0.069	0.019	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
<b>Dibenz(a,h)anthracene</b>	<b>0.020</b> J		0.069	0.014	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Dibenzofuran	<0.35		0.35	0.082	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Diethyl phthalate	<0.35		0.35	0.12	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Dimethyl phthalate	<0.35		0.35	0.091	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Di-n-butyl phthalate	<0.35		0.35	0.11	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Di-n-octyl phthalate	<0.35		0.35	0.11	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
<b>Fluoranthene</b>	<b>0.15</b>		0.069	0.013	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Fluorene	<0.069		0.069	0.0098	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Hexachlorobenzene	<0.14		0.14	0.016	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Hexachlorobutadiene	<0.35		0.35	0.11	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Hexachlorocyclopentadiene	<1.4		1.4	0.40	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Hexachloroethane	<0.35		0.35	0.11	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B45**

**Lab Sample ID: 500-223815-5**

Date Collected: 10/13/22 10:25

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 69.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.052</b>	<b>J**</b>	0.069	0.018	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Isophorone	<0.35		0.35	0.078	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Naphthalene	<0.069		0.069	0.011	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Nitrobenzene	<0.069		0.069	0.017	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
N-Nitrosodi-n-propylamine	<0.14		0.14	0.085	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
N-Nitrosodiphenylamine	<0.35		0.35	0.082	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Pentachlorophenol	<1.4		1.4	1.1	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
<b>Phenanthrene</b>	<b>0.049</b>	<b>J</b>	0.069	0.0097	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Phenol	<0.35		0.35	0.16	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
<b>Pyrene</b>	<b>0.13</b>		0.069	0.014	mg/Kg	☼	10/24/22 13:25	10/31/22 14:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	95		31 - 143				10/24/22 13:25	10/31/22 14:41	1
2-Fluorobiphenyl	74		43 - 145				10/24/22 13:25	10/31/22 14:41	1
2-Fluorophenol	96		31 - 166				10/24/22 13:25	10/31/22 14:41	1
Nitrobenzene-d5 (Surr)	66		37 - 147				10/24/22 13:25	10/31/22 14:41	1
Phenol-d5	81		30 - 153				10/24/22 13:25	10/31/22 14:41	1
Terphenyl-d14 (Surr)	134		42 - 157				10/24/22 13:25	10/31/22 14:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.56</b>	<b>J B</b>	1.4	0.27	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Arsenic</b>	<b>8.1</b>		0.69	0.24	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Barium</b>	<b>90</b>		0.69	0.078	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Beryllium</b>	<b>1.0</b>	<b>B</b>	0.28	0.064	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Boron</b>	<b>10</b>	<b>B</b>	3.4	0.32	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Cadmium</b>	<b>0.83</b>	<b>B</b>	0.14	0.025	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Calcium</b>	<b>11000</b>		69	12	mg/Kg	☼	10/26/22 09:56	10/28/22 13:07	5
<b>Chromium</b>	<b>20</b>		0.69	0.34	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Cobalt</b>	<b>12</b>		0.34	0.090	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Copper</b>	<b>39</b>		0.69	0.19	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Iron</b>	<b>21000</b>	<b>B</b>	14	7.2	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Lead</b>	<b>50</b>		0.34	0.16	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Magnesium</b>	<b>7100</b>		6.9	3.4	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Manganese</b>	<b>200</b>		0.69	0.10	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Nickel</b>	<b>35</b>		0.69	0.20	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Potassium</b>	<b>2500</b>		34	12	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Selenium</b>	<b>0.66</b>	<b>J</b>	0.69	0.40	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
Silver	<0.34		0.34	0.089	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Sodium</b>	<b>2600</b>		69	10	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Thallium</b>	<b>0.64</b>	<b>J</b>	0.69	0.34	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Vanadium</b>	<b>29</b>		0.34	0.081	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1
<b>Zinc</b>	<b>150</b>		1.4	0.60	mg/Kg	☼	10/26/22 09:56	10/27/22 21:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/24/22 08:31	10/27/22 20:49	1
Chromium	<0.025		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 20:49	1
<b>Iron</b>	<b>0.20</b>	<b>J</b>	0.40	0.20	mg/L		10/24/22 08:31	10/27/22 20:49	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/24/22 08:31	10/27/22 20:49	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B45**

**Lab Sample ID: 500-223815-5**

Date Collected: 10/13/22 10:25

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 69.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.36		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 20:49	1
Nickel	<0.025		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 20:49	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.033	J	0.050	0.010	mg/L		10/24/22 08:35	10/25/22 23:56	1
Barium	0.51		0.50	0.050	mg/L		10/24/22 08:35	10/25/22 23:56	1
Beryllium	0.0062		0.0040	0.0040	mg/L		10/24/22 08:35	10/26/22 18:07	1
Boron	0.11		0.10	0.050	mg/L		10/24/22 08:35	10/25/22 23:56	1
Cadmium	0.0028	J	0.0050	0.0020	mg/L		10/24/22 08:35	10/25/22 23:56	1
Calcium	20		2.5	0.50	mg/L		10/24/22 08:35	10/25/22 23:56	1
Chromium	0.13		0.025	0.010	mg/L		10/24/22 08:35	10/25/22 23:56	1
Cobalt	0.029		0.025	0.010	mg/L		10/24/22 08:35	10/25/22 23:56	1
Iron	110		0.40	0.20	mg/L		10/24/22 08:35	10/26/22 18:07	1
Lead	0.60		0.0075	0.0075	mg/L		10/24/22 08:35	10/25/22 23:56	1
Manganese	0.47		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 18:07	1
Nickel	0.11		0.025	0.010	mg/L		10/24/22 08:35	10/25/22 23:56	1
Potassium	24		2.5	0.50	mg/L		10/24/22 08:35	10/25/22 23:56	1
Selenium	<0.050		0.050	0.020	mg/L		10/24/22 08:35	10/26/22 18:07	1
Silver	<0.025		0.025	0.010	mg/L		10/24/22 08:35	10/25/22 23:56	1
Zinc	0.70		0.50	0.020	mg/L		10/24/22 08:35	10/25/22 23:56	1

**Method: SW846 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		10/24/22 08:31	10/27/22 17:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/24/22 08:35	10/26/22 22:05	1
Thallium	0.0037		0.0020	0.0020	mg/L		10/24/22 08:35	10/26/22 22:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/27/22 11:15	10/28/22 13:35	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.086		0.022	0.0075	mg/Kg	☆	10/26/22 07:45	10/26/22 14:41	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.34	J	0.72	0.27	mg/Kg	☆	10/27/22 16:00	10/27/22 16:58	1
pH (SW846 9045D)	7.7		0.2	0.2	SU			10/20/22 15:46	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B45 DUP**

**Lab Sample ID: 500-223815-6**

**Date Collected: 10/13/22 10:30**

**Matrix: Solid**

**Date Received: 10/14/22 11:00**

**Percent Solids: 71.4**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0024		0.0024	0.00080	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
1,1,2,2-Tetrachloroethane	<0.0024		0.0024	0.00076	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
1,1,2-Trichloroethane	<0.0024		0.0024	0.0010	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
1,1-Dichloroethane	<0.0024		0.0024	0.00082	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
1,1-Dichloroethene	<0.0024		0.0024	0.00082	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
1,2-Dichloroethane	<0.0060		0.0060	0.0019	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
1,2-Dichloropropane	<0.0024		0.0024	0.00062	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
1,3-Dichloropropene, Total	<0.0024		0.0024	0.00084	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
2-Butanone (MEK)	<0.0060		0.0060	0.0027	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
2-Hexanone	<0.0060		0.0060	0.0019	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
4-Methyl-2-pentanone (MIBK)	<0.0060		0.0060	0.0018	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
<b>Acetone</b>	<b>0.012</b>	<b>J</b>	0.024	0.010	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Benzene	<0.0024		0.0024	0.00061	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Bromodichloromethane	<0.0024		0.0024	0.00049	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Bromoform	<0.0024		0.0024	0.00070	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Bromomethane	<0.0060		0.0060	0.0023	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Carbon disulfide	<0.0060		0.0060	0.0012	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Carbon tetrachloride	<0.0024		0.0024	0.00069	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Chlorobenzene	<0.0024		0.0024	0.00088	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Chloroethane	<0.0060		0.0060	0.0018	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Chloroform	<0.0024		0.0024	0.00083	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Chloromethane	<0.0060		0.0060	0.0024	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
cis-1,2-Dichloroethene	<0.0024		0.0024	0.00067	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
cis-1,3-Dichloropropene	<0.0024		0.0024	0.00072	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Dibromochloromethane	<0.0024		0.0024	0.00078	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Ethylbenzene	<0.0024		0.0024	0.0011	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Methyl tert-butyl ether	<0.0024		0.0024	0.00070	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Methylene Chloride	<0.0060		0.0060	0.0024	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Styrene	<0.0024		0.0024	0.00072	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Tetrachloroethene	<0.0024		0.0024	0.00081	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Toluene	<0.0024		0.0024	0.00060	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
trans-1,2-Dichloroethene	<0.0024		0.0024	0.0011	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
trans-1,3-Dichloropropene	<0.0024		0.0024	0.00084	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Trichloroethene	<0.0024		0.0024	0.00081	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Vinyl chloride	<0.0024		0.0024	0.0011	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1
Xylenes, Total	<0.0048		0.0048	0.00076	mg/Kg	☼	10/14/22 20:12	10/23/22 15:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 134	10/14/22 20:12	10/23/22 15:19	1
4-Bromofluorobenzene (Surr)	90		75 - 131	10/14/22 20:12	10/23/22 15:19	1
Dibromofluoromethane	108		75 - 126	10/14/22 20:12	10/23/22 15:19	1
Toluene-d8 (Surr)	114		75 - 124	10/14/22 20:12	10/23/22 15:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.23		0.23	0.049	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
1,2-Dichlorobenzene	<0.23		0.23	0.054	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
1,3-Dichlorobenzene	<0.23		0.23	0.051	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
1,4-Dichlorobenzene	<0.23		0.23	0.058	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
2,2'-oxybis[1-chloropropane]	<0.23		0.23	0.053	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B45 DUP**

**Lab Sample ID: 500-223815-6**

**Date Collected: 10/13/22 10:30**

**Matrix: Solid**

**Date Received: 10/14/22 11:00**

**Percent Solids: 71.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.45		0.45	0.10	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
2,4,6-Trichlorophenol	<0.45		0.45	0.16	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
2,4-Dichlorophenol	<0.45		0.45	0.11	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
2,4-Dimethylphenol	<0.45		0.45	0.17	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
2,4-Dinitrophenol	<0.92		0.92	0.80	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
2,4-Dinitrotoluene	<0.23		0.23	0.072	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
2,6-Dinitrotoluene	<0.23		0.23	0.089	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
2-Chloronaphthalene	<0.23		0.23	0.050	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
2-Chlorophenol	<0.23		0.23	0.078	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
2-Methylnaphthalene	<0.092		0.092	0.0084	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
2-Methylphenol	<0.23		0.23	0.073	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
2-Nitroaniline	<0.23		0.23	0.061	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
2-Nitrophenol	<0.45		0.45	0.11	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
3 & 4 Methylphenol	<0.23		0.23	0.076	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
3,3'-Dichlorobenzidine	<0.23	*3	0.23	0.064	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
3-Nitroaniline	<0.45		0.45	0.14	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
4,6-Dinitro-2-methylphenol	<0.92		0.92	0.37	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
4-Bromophenyl phenyl ether	<0.23		0.23	0.060	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
4-Chloro-3-methylphenol	<0.45		0.45	0.15	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
4-Chloroaniline	<0.92		0.92	0.21	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
4-Chlorophenyl phenyl ether	<0.23		0.23	0.053	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
4-Nitroaniline	<0.45		0.45	0.19	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
4-Nitrophenol	<0.92		0.92	0.43	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Acenaphthene</b>	<b>0.023</b>	<b>J</b>	0.045	0.0082	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Acenaphthylene</b>	<b>0.014</b>	<b>J</b>	0.045	0.0060	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Anthracene</b>	<b>0.067</b>		0.045	0.0076	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Benzo[a]anthracene</b>	<b>0.64</b>	<b>*3</b>	0.045	0.0061	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Benzo[a]pyrene</b>	<b>0.89</b>	<b>*3</b>	0.045	0.0088	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Benzo[b]fluoranthene</b>	<b>1.3</b>	<b>*3</b>	0.045	0.0098	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Benzo[g,h,i]perylene</b>	<b>0.77</b>	<b>*3 *+</b>	0.045	0.015	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Benzo[k]fluoranthene</b>	<b>0.63</b>	<b>*3</b>	0.045	0.013	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Bis(2-chloroethoxy)methane	<0.23		0.23	0.046	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Bis(2-chloroethyl)ether	<0.23		0.23	0.068	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Bis(2-ethylhexyl) phthalate</b>	<b>2.8</b>	<b>*3</b>	0.23	0.083	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Butyl benzyl phthalate</b>	<b>0.50</b>	<b>*3</b>	0.23	0.086	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Carbazole	<0.23		0.23	0.11	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Chrysene</b>	<b>0.82</b>	<b>*3</b>	0.045	0.012	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Dibenz(a,h)anthracene</b>	<b>0.19</b>	<b>*3</b>	0.045	0.0088	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Dibenzofuran	<0.23		0.23	0.053	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Diethyl phthalate	<0.23		0.23	0.077	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Dimethyl phthalate	<0.23		0.23	0.059	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Di-n-butyl phthalate	<0.23		0.23	0.069	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Di-n-octyl phthalate	<0.23		0.23	0.074	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Fluoranthene</b>	<b>0.98</b>		0.045	0.0084	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Fluorene</b>	<b>0.018</b>	<b>J</b>	0.045	0.0064	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Hexachlorobenzene	<0.092		0.092	0.011	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Hexachlorobutadiene	<0.23		0.23	0.071	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Hexachlorocyclopentadiene	<0.92		0.92	0.26	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Hexachloroethane	<0.23		0.23	0.069	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B45 DUP**

**Lab Sample ID: 500-223815-6**

Date Collected: 10/13/22 10:30

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 71.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.65</b>	<b>*3 **</b>	0.045	0.012	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Isophorone	<0.23		0.23	0.051	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Naphthalene</b>	<b>0.023</b>	<b>J</b>	0.045	0.0070	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Nitrobenzene	<0.045		0.045	0.011	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
N-Nitrosodi-n-propylamine	<0.092		0.092	0.056	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
N-Nitrosodiphenylamine	<0.23		0.23	0.054	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Pentachlorophenol	<0.92		0.92	0.73	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Phenanthrene</b>	<b>0.45</b>		0.045	0.0063	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
Phenol	<0.23		0.23	0.10	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Pyrene</b>	<b>2.1</b>	<b>*3</b>	0.045	0.0090	mg/Kg	☼	10/24/22 13:25	10/29/22 00:38	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2,4,6-Tribromophenol	96		31 - 143				10/24/22 13:25	10/29/22 00:38	1
2-Fluorobiphenyl	79		43 - 145				10/24/22 13:25	10/29/22 00:38	1
2-Fluorophenol	100		31 - 166				10/24/22 13:25	10/29/22 00:38	1
Nitrobenzene-d5 (Surr)	63		37 - 147				10/24/22 13:25	10/29/22 00:38	1
Phenol-d5	103		30 - 153				10/24/22 13:25	10/29/22 00:38	1
Terphenyl-d14 (Surr)	305	S1+ *3	42 - 157				10/24/22 13:25	10/29/22 00:38	1

**Method: SW846 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.3		1.3	0.26	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Arsenic</b>	<b>7.8</b>		0.66	0.23	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Barium</b>	<b>88</b>		0.66	0.075	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Beryllium</b>	<b>0.99</b>	<b>B</b>	0.26	0.062	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Boron</b>	<b>11</b>	<b>B</b>	3.3	0.31	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Cadmium</b>	<b>0.39</b>	<b>B</b>	0.13	0.024	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Calcium</b>	<b>10000</b>		13	2.2	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Chromium</b>	<b>19</b>		0.66	0.33	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Cobalt</b>	<b>7.8</b>		0.33	0.087	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Copper</b>	<b>30</b>		0.66	0.18	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Iron</b>	<b>20000</b>	<b>B</b>	13	6.9	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Lead</b>	<b>48</b>		0.33	0.15	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Magnesium</b>	<b>6500</b>		6.6	3.3	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Manganese</b>	<b>150</b>		0.66	0.096	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Nickel</b>	<b>26</b>		0.66	0.19	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Potassium</b>	<b>2200</b>		33	12	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Selenium</b>	<b>0.66</b>		0.66	0.39	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Silver</b>	<b>0.42</b>		0.33	0.085	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Sodium</b>	<b>2600</b>		66	9.8	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Thallium</b>	<b>0.62</b>	<b>J</b>	0.66	0.33	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Vanadium</b>	<b>26</b>		0.33	0.078	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1
<b>Zinc</b>	<b>80</b>		1.3	0.58	mg/Kg	☼	10/26/22 09:56	10/27/22 21:09	1

**Method: SW846 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		10/24/22 08:31	10/27/22 20:53	1
<b>Lead</b>	<b>0.016</b>		0.0075	0.0075	mg/L		10/24/22 08:31	10/27/22 20:53	1
<b>Manganese</b>	<b>0.99</b>		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 20:53	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B45 DUP**

**Lab Sample ID: 500-223815-6**

Date Collected: 10/13/22 10:30

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 71.4

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.019	J	0.050	0.010	mg/L		10/24/22 08:35	10/25/22 23:59	1
Barium	0.29	J	0.50	0.050	mg/L		10/24/22 08:35	10/25/22 23:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/24/22 08:35	10/26/22 18:11	1
Boron	0.084	J	0.10	0.050	mg/L		10/24/22 08:35	10/25/22 23:59	1
Cadmium	0.0027	J	0.0050	0.0020	mg/L		10/24/22 08:35	10/25/22 23:59	1
Calcium	17		2.5	0.50	mg/L		10/24/22 08:35	10/25/22 23:59	1
Chromium	0.10		0.025	0.010	mg/L		10/24/22 08:35	10/25/22 23:59	1
Cobalt	0.017	J	0.025	0.010	mg/L		10/24/22 08:35	10/25/22 23:59	1
Iron	62		0.40	0.20	mg/L		10/24/22 08:35	10/26/22 18:11	1
Lead	0.54		0.0075	0.0075	mg/L		10/24/22 08:35	10/25/22 23:59	1
Manganese	0.37		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 18:11	1
Nickel	0.067		0.025	0.010	mg/L		10/24/22 08:35	10/25/22 23:59	1
Potassium	14		2.5	0.50	mg/L		10/24/22 08:35	10/25/22 23:59	1
Selenium	<0.050		0.050	0.020	mg/L		10/24/22 08:35	10/26/22 18:11	1
Silver	<0.025		0.025	0.010	mg/L		10/24/22 08:35	10/25/22 23:59	1
Zinc	0.84		0.50	0.020	mg/L		10/24/22 08:35	10/25/22 23:59	1

**Method: SW846 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		10/24/22 08:31	11/09/22 18:05	1

**Method: SW846 6020A - Metals (ICP/MS) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/24/22 08:35	10/26/22 22:08	1
Thallium	0.0024		0.0020	0.0020	mg/L		10/24/22 08:35	10/26/22 22:08	1

**Method: SW846 7470A - Mercury (CVAA) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/27/22 11:15	10/28/22 13:38	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.074		0.022	0.0072	mg/Kg	☼	10/26/22 07:45	10/26/22 14:47	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.59	J	0.70	0.27	mg/Kg	☼	10/27/22 16:00	10/27/22 17:00	1
pH (SW846 9045D)	8.4		0.2	0.2	SU			10/20/22 13:37	1



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B49**

**Lab Sample ID: 500-223815-14**

**Date Collected: 10/13/22 12:00**

**Matrix: Solid**

**Date Received: 10/14/22 11:00**

**Percent Solids: 79.4**

**Method: SW846 8260B - Volatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00065	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00062	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00083	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
1,1-Dichloroethane	<0.0019		0.0019	0.00067	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
1,1-Dichloroethene	<0.0019		0.0019	0.00067	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00068	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
<b>2-Butanone (MEK)</b>	<b>0.0087</b>		0.0049	0.0022	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0014	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
<b>Acetone</b>	<b>0.052</b>		0.019	0.0085	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Benzene	<0.0019		0.0019	0.00050	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Bromodichloromethane	<0.0019		0.0019	0.00040	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Bromoform	<0.0019		0.0019	0.00057	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Bromomethane	<0.0049		0.0049	0.0018	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Carbon tetrachloride	<0.0019		0.0019	0.00056	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Chlorobenzene	<0.0019		0.0019	0.00072	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Chloroethane	<0.0049		0.0049	0.0014	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Chloroform	<0.0019		0.0019	0.00067	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00059	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Dibromochloromethane	<0.0019		0.0019	0.00064	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Ethylbenzene	<0.0019		0.0019	0.00093	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00057	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Styrene	<0.0019		0.0019	0.00059	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Tetrachloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Toluene	<0.0019		0.0019	0.00049	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00086	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00068	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Trichloroethene	<0.0019		0.0019	0.00066	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Vinyl chloride	<0.0019		0.0019	0.00086	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1
Xylenes, Total	<0.0039		0.0039	0.00062	mg/Kg	☼	10/14/22 20:12	10/23/22 18:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 134	10/14/22 20:12	10/23/22 18:25	1
4-Bromofluorobenzene (Surr)	86		75 - 131	10/14/22 20:12	10/23/22 18:25	1
Dibromofluoromethane	107		75 - 126	10/14/22 20:12	10/23/22 18:25	1
Toluene-d8 (Surr)	110		75 - 124	10/14/22 20:12	10/23/22 18:25	1

**Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
1,2-Dichlorobenzene	<0.20	*3	0.20	0.047	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
1,3-Dichlorobenzene	<0.20	*3	0.20	0.044	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
1,4-Dichlorobenzene	<0.20	*3	0.20	0.050	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
2,2'-oxybis[1-chloropropane]	<0.20	*3	0.20	0.045	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B49**

**Lab Sample ID: 500-223815-14**

**Date Collected: 10/13/22 12:00**

**Matrix: Solid**

**Date Received: 10/14/22 11:00**

**Percent Solids: 79.4**

**Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
2-Chlorophenol	<0.20	*3	0.20	0.067	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>2-Methylnaphthalene</b>	<b>0.0077</b>	<b>J</b>	0.079	0.0072	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
2-Methylphenol	<0.20	*3	0.20	0.063	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
3 & 4 Methylphenol	<0.20	*3	0.20	0.065	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
3,3'-Dichlorobenzidine	<0.20	*3	0.20	0.055	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Acenaphthene</b>	<b>0.040</b>		0.039	0.0070	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Acenaphthylene</b>	<b>0.0080</b>	<b>J</b>	0.039	0.0052	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Anthracene</b>	<b>0.070</b>		0.039	0.0066	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Benzo[a]anthracene</b>	<b>0.36</b>	<b>*3</b>	0.039	0.0053	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Benzo[a]pyrene</b>	<b>0.59</b>	<b>*3</b>	0.039	0.0076	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Benzo[b]fluoranthene</b>	<b>0.95</b>	<b>*3</b>	0.039	0.0085	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Benzo[g,h,i]perylene</b>	<b>0.34</b>	<b>*3 *+</b>	0.039	0.013	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Benzo[k]fluoranthene</b>	<b>0.46</b>	<b>*3</b>	0.039	0.012	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Bis(2-chloroethyl)ether	<0.20	*3	0.20	0.059	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Bis(2-ethylhexyl) phthalate</b>	<b>0.097</b>	<b>J *3</b>	0.20	0.072	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Butyl benzyl phthalate	<0.20	*3	0.20	0.075	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Chrysene</b>	<b>0.48</b>	<b>*3</b>	0.039	0.011	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Dibenz(a,h)anthracene</b>	<b>0.11</b>	<b>*3</b>	0.039	0.0076	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Fluoranthene</b>	<b>0.65</b>		0.039	0.0073	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Fluorene</b>	<b>0.040</b>		0.039	0.0055	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Hexachloroethane	<0.20	*3	0.20	0.060	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B49**

**Lab Sample ID: 500-223815-14**

Date Collected: 10/13/22 12:00

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 79.4

## Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.32</b>	<b>*3 **</b>	0.039	0.010	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Naphthalene</b>	<b>0.010</b>	<b>J</b>	0.039	0.0060	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
N-Nitrosodi-n-propylamine	<0.079	*3	0.079	0.048	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Phenanthrene</b>	<b>0.28</b>		0.039	0.0055	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Phenol	<0.20	*3	0.20	0.087	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
<b>Pyrene</b>	<b>1.1</b>	<b>*3</b>	0.039	0.0078	mg/Kg	☼	10/24/22 13:25	10/28/22 22:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	125		31 - 143				10/24/22 13:25	10/28/22 22:43	1
2-Fluorobiphenyl	107		43 - 145				10/24/22 13:25	10/28/22 22:43	1
2-Fluorophenol	144	*3	31 - 166				10/24/22 13:25	10/28/22 22:43	1
Nitrobenzene-d5 (Surr)	89		37 - 147				10/24/22 13:25	10/28/22 22:43	1
Phenol-d5	149	*3	30 - 153				10/24/22 13:25	10/28/22 22:43	1
Terphenyl-d14 (Surr)	249	S1+ *3	42 - 157				10/24/22 13:25	10/28/22 22:43	1

## Method: SW846 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Arsenic</b>	<b>7.7</b>		0.62	0.21	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Barium</b>	<b>71</b>		0.62	0.071	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Beryllium</b>	<b>0.78</b>	<b>B</b>	0.25	0.058	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Boron</b>	<b>8.8</b>	<b>B</b>	3.1	0.29	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Cadmium</b>	<b>0.23</b>	<b>B</b>	0.12	0.022	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Calcium</b>	<b>70000</b>		62	11	mg/Kg	☼	10/26/22 09:56	10/28/22 13:36	5
<b>Chromium</b>	<b>19</b>		0.62	0.31	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Cobalt</b>	<b>8.4</b>		0.31	0.082	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Copper</b>	<b>16</b>		0.62	0.17	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Iron</b>	<b>17000</b>	<b>B</b>	12	6.5	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Lead</b>	<b>130</b>		0.31	0.14	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Magnesium</b>	<b>35000</b>		6.2	3.1	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Manganese</b>	<b>220</b>		0.62	0.090	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Nickel</b>	<b>17</b>		0.62	0.18	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Potassium</b>	<b>1600</b>		31	11	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
Selenium	<0.62		0.62	0.37	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Silver</b>	<b>0.23</b>	<b>J</b>	0.31	0.080	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Sodium</b>	<b>3400</b>		62	9.2	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
Thallium	<0.62		0.62	0.31	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Vanadium</b>	<b>23</b>		0.31	0.074	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1
<b>Zinc</b>	<b>55</b>		1.2	0.55	mg/Kg	☼	10/26/22 09:56	10/27/22 21:33	1

## Method: SW846 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.013</b>	<b>J</b>	0.050	0.010	mg/L		10/24/22 08:31	10/27/22 21:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/24/22 08:31	10/27/22 21:22	1
Chromium	<0.025		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 21:22	1
<b>Iron</b>	<b>0.64</b>		0.40	0.20	mg/L		10/24/22 08:31	10/27/22 21:22	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B49**

**Lab Sample ID: 500-223815-14**

Date Collected: 10/13/22 12:00

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 79.4

**Method: SW846 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		10/24/22 08:31	10/27/22 21:22	1
Manganese	7.0		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 21:22	1
Nickel	0.019	J	0.025	0.010	mg/L		10/24/22 08:31	10/27/22 21:22	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.11		0.050	0.010	mg/L		10/24/22 08:35	10/26/22 00:22	1
Barium	0.86		0.50	0.050	mg/L		10/24/22 08:35	10/26/22 00:22	1
Beryllium	0.012		0.0040	0.0040	mg/L		10/24/22 08:35	10/26/22 18:39	1
Boron	0.14		0.10	0.050	mg/L		10/24/22 08:35	10/26/22 00:22	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/24/22 08:35	10/26/22 00:22	1
Calcium	26		2.5	0.50	mg/L		10/24/22 08:35	10/26/22 00:22	1
Chromium	0.21		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:22	1
Cobalt	0.080		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:22	1
Iron	250		0.40	0.20	mg/L		10/24/22 08:35	10/26/22 18:39	1
Lead	0.48		0.0075	0.0075	mg/L		10/24/22 08:35	10/26/22 00:22	1
Manganese	3.6		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 18:39	1
Nickel	0.24		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:22	1
Potassium	33		2.5	0.50	mg/L		10/24/22 08:35	10/26/22 00:22	1
Selenium	<0.050		0.050	0.020	mg/L		10/24/22 08:35	10/26/22 18:39	1
Silver	<0.025		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:22	1
Zinc	0.54		0.50	0.020	mg/L		10/24/22 08:35	10/26/22 00:22	1

**Method: SW846 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		10/24/22 08:31	10/27/22 18:06	1

**Method: SW846 6020A - Metals (ICP/MS) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/24/22 08:35	10/26/22 22:39	1
Thallium	0.0046		0.0020	0.0020	mg/L		10/24/22 08:35	10/26/22 22:39	1

**Method: SW846 7470A - Mercury (CVAA) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/27/22 11:15	10/28/22 13:57	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044		0.019	0.0063	mg/Kg	✱	10/26/22 07:45	10/26/22 15:01	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.63		0.63	0.24	mg/Kg	✱	10/27/22 16:36	10/27/22 17:54	1
pH (SW846 9045D)	8.1		0.2	0.2	SU			10/20/22 16:01	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*3	ISTD response or retention time outside acceptable limits.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### Metals

Qualifier	Qualifier Description
^-	Continuing Calibration Verification (CCV) is outside acceptance limits, low biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent

Eurofins Chicago

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

## Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

## Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-27-23
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22















# Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

## Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

### I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: FAU 1321 (IL 19) Office Phone Number, if available: \_\_\_\_\_

Physical Site Location (address, including number and street):

21W180 Irving Park Road (northeast corner of Irving Park Road and Baker Drive)

City: Itasca State: IL Zip Code: 60143

County: DuPage Township: Bloomington

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 41.97377 Longitude: -88.03573  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

IEPA Site Number(s), if assigned: BOL: \_\_\_\_\_ BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

Approximate Start Date (mm/dd/yyyy): N/A Approximate End Date (mm/dd/yyyy): N/A

Estimated Volume of debris (cu. Yd.): 67

### II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: \_\_\_\_\_

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4122

Contact: Irma Romiti-Johnson

Email, if available: Irma.Romiti-Johnson@illinois.gov

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Uncontaminated Soil Certification

**III. Basis for Certification and Attachments**

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATION 62R60-B39 WAS SAMPLED ADJACENT TO SITES 4386-62 AND 4386-63. SEE TABLE 3w AND FIGURE 11 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

- b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 Ill. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 Ill. Adm. Code 1100.201 (g), 1100.205(a), 1100.610]:

EUROFINS ANALYTICAL REPORT- EUROFINS JOB ID NUMBER: 500-223815.

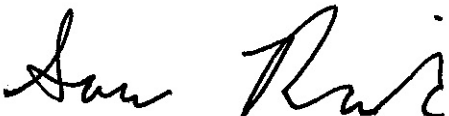
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

I, Savo Radulovic, L.P.G (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

***Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))***

Company Name: Andrews Engineering, Inc.  
Street Address: 420 Eisenhower Lane North  
City: Lombard State: IL Zip Code: 60148  
Phone: 630-953-3332

Savo Radulovic  
Printed Name:



Licensed Professional Engineer or  
Licensed Professional Geologist Signature:

Jun 21, 2024  
Date:



The following table summarizes the results of laboratory analysis of site soil samples. In reading the table,

- Only parameters reported at concentrations above the most stringent MAC are listed.
- Samples with the notation “**No Contaminants of Concern Noted**” were below the most stringent MAC.

The laboratory report for site soils follows this summary table.

**THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES**

**ANALYTICAL PARAMETERS**

<b>Volatile Organic Compounds (mg/kg)</b>
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
<b>Semivolatile Organic Compounds (mg/kg)</b>
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**

<b>Semivolatile Organic Compounds (mg/kg)</b>
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**

<b>Semivolatile Organic Compounds (mg/kg)</b>
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
<b>Inorganic Compounds, Total (mg/kg)</b>
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
Cyanide
<b>TCLP/SPLP Inorganics (mg/L)</b>
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc
Cyanide

**ISGS Site 4386-62**

**Vacant Lot**

<b>Sample ID</b>	62R60-B39	<b>Maximum Allowable Concentration</b>				
<b>Sample Depth (ft)</b>	0-2					
<b>Sample Date</b>	10/13/2022	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area
<b>PID</b>	0					
<b>Sample pH</b>	8					
<b>Matrix</b>	Soil					
<b>No Contaminants of Concern Noted.</b>						



## ANALYTICAL REPORT

Eurofins Chicago  
2417 Bond Street  
University Park, IL 60484  
Tel: (708)534-5200

Laboratory Job ID: 500-223815-1  
Client Project/Site: IDOT - AE8-003  
Revision: 1

For:  
Andrews Engineering Inc.  
3300 Ginger Creek Drive  
Springfield, Illinois 62711

Attn: Ms. Colleen Grey

*Jodie Bracken*

Authorized for release by:

11/10/2022 5:20:22 PM

Jodie Bracken, Project Management Assistant II

[Jodie.Bracken@et.eurofinsus.com](mailto:Jodie.Bracken@et.eurofinsus.com)

Designee for

Richard Wright, Senior Project Manager

(708)746-0045

[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)

### LINKS

Review your project  
results through



Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the {0} Project Manager.

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B39**

**Lab Sample ID: 500-223815-15**

**Date Collected: 10/13/22 12:15**

**Matrix: Solid**

**Date Received: 10/14/22 11:00**

**Percent Solids: 85.2**

**Method: SW846 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	☼	10/14/22 20:12	10/23/22 18:48	1
1,1,1,2-Tetrachloroethane	<0.0017	*3	0.0017	0.00054	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00073	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0013	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Acetone	<0.017		0.017	0.0074	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Carbon disulfide	<0.0042		0.0042	0.00088	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Chloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Chloroform	<0.0017		0.0017	0.00059	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00051	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Ethylbenzene	<0.0017		0.0017	0.00081	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Tetrachloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00075	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Vinyl chloride	<0.0017		0.0017	0.00075	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	10/14/22 20:12	10/23/22 18:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 134	10/14/22 20:12	10/23/22 18:48	1
4-Bromofluorobenzene (Surr)	112	*3	75 - 131	10/14/22 20:12	10/23/22 18:48	1
Dibromofluoromethane	109		75 - 126	10/14/22 20:12	10/23/22 18:48	1
Toluene-d8 (Surr)	122		75 - 124	10/14/22 20:12	10/23/22 18:48	1

**Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	10/24/22 13:25	10/31/22 15:29	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	10/24/22 13:25	10/31/22 15:29	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	10/24/22 13:25	10/31/22 15:29	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	10/24/22 13:25	10/31/22 15:29	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	10/24/22 13:25	10/31/22 15:29	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B39**

**Lab Sample ID: 500-223815-15**

**Date Collected: 10/13/22 12:15**

**Matrix: Solid**

**Date Received: 10/14/22 11:00**

**Percent Solids: 85.2**

**Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
<b>Anthracene</b>	<b>0.0068</b>	<b>J</b>	0.037	0.0062	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
<b>Benzo[a]anthracene</b>	<b>0.034</b>	<b>J</b>	0.037	0.0050	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
<b>Benzo[a]pyrene</b>	<b>0.038</b>	<b>*3</b>	0.037	0.0072	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
<b>Benzo[b]fluoranthene</b>	<b>0.075</b>	<b>*3</b>	0.037	0.0080	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
<b>Benzo[g,h,i]perylene</b>	<b>0.026</b>	<b>J *3 *+</b>	0.037	0.012	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
<b>Benzo[k]fluoranthene</b>	<b>0.020</b>	<b>J *3</b>	0.037	0.011	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Carbazole	<0.19		0.19	0.093	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
<b>Chrysene</b>	<b>0.060</b>		0.037	0.010	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Dibenz(a,h)anthracene	<0.037	<b>*3</b>	0.037	0.0072	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
<b>Fluoranthene</b>	<b>0.079</b>		0.037	0.0069	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	✳	10/24/22 13:25	10/31/22 15:29	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B39**

**Lab Sample ID: 500-223815-15**

Date Collected: 10/13/22 12:15

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 85.2

**Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Indeno[1,2,3-cd]pyrene</b>	<b>0.021</b>	<b>J *3 *+</b>	0.037	0.0096	mg/Kg	☼	10/24/22 13:25	10/31/22 15:29	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	10/24/22 13:25	10/31/22 15:29	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	10/24/22 13:25	10/31/22 15:29	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	10/24/22 13:25	10/31/22 15:29	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	☼	10/24/22 13:25	10/31/22 15:29	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	10/24/22 13:25	10/31/22 15:29	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	10/24/22 13:25	10/31/22 15:29	1
<b>Phenanthrene</b>	<b>0.034</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	10/24/22 13:25	10/31/22 15:29	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	10/24/22 13:25	10/31/22 15:29	1
<b>Pyrene</b>	<b>0.074</b>		0.037	0.0074	mg/Kg	☼	10/24/22 13:25	10/31/22 15:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	96		31 - 143				10/24/22 13:25	10/31/22 15:29	1
2-Fluorobiphenyl	113		43 - 145				10/24/22 13:25	10/31/22 15:29	1
2-Fluorophenol	118		31 - 166				10/24/22 13:25	10/31/22 15:29	1
Nitrobenzene-d5 (Surr)	109		37 - 147				10/24/22 13:25	10/31/22 15:29	1
Phenol-d5	112		30 - 153				10/24/22 13:25	10/31/22 15:29	1
Terphenyl-d14 (Surr)	155		42 - 157				10/24/22 13:25	10/31/22 15:29	1

**Method: SW846 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.23	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Arsenic</b>	<b>11</b>		0.59	0.20	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Barium</b>	<b>73</b>		0.59	0.067	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Beryllium</b>	<b>0.91</b>	<b>B</b>	0.23	0.055	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Boron</b>	<b>9.4</b>	<b>B</b>	2.9	0.27	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Cadmium</b>	<b>0.24</b>	<b>B</b>	0.12	0.021	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Calcium</b>	<b>29000</b>		12	2.0	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Chromium</b>	<b>18</b>		0.59	0.29	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Cobalt</b>	<b>13</b>		0.29	0.077	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Copper</b>	<b>27</b>		0.59	0.16	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Iron</b>	<b>23000</b>	<b>B</b>	12	6.1	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Lead</b>	<b>23</b>		0.29	0.14	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Magnesium</b>	<b>16000</b>		5.9	2.9	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Manganese</b>	<b>400</b>		0.59	0.085	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Nickel</b>	<b>32</b>		0.59	0.17	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Potassium</b>	<b>2300</b>		29	10	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
Selenium	<0.59		0.59	0.34	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Silver</b>	<b>0.36</b>		0.29	0.075	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Sodium</b>	<b>400</b>		59	8.7	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Thallium</b>	<b>0.54</b>	<b>J</b>	0.59	0.29	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Vanadium</b>	<b>24</b>		0.29	0.069	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1
<b>Zinc</b>	<b>63</b>		1.2	0.51	mg/Kg	☼	10/26/22 09:56	10/27/22 21:36	1

**Method: SW846 6010B - Metals (ICP) - TCLP**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/24/22 08:31	10/27/22 21:26	1
Iron	<0.40		0.40	0.20	mg/L		10/24/22 08:31	10/27/22 21:26	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/24/22 08:31	10/27/22 21:26	1
<b>Manganese</b>	<b>0.046</b>		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 21:26	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

**Client Sample ID: 62R60-B39**

**Lab Sample ID: 500-223815-15**

Date Collected: 10/13/22 12:15

Matrix: Solid

Date Received: 10/14/22 11:00

Percent Solids: 85.2

**Method: SW846 6010B - Metals (ICP) - TCLP (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	<0.025		0.025	0.010	mg/L		10/24/22 08:31	10/27/22 21:26	1

**Method: SW846 6010B - Metals (ICP) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.044	J	0.050	0.010	mg/L		10/24/22 08:35	10/26/22 00:32	1
Barium	0.38	J	0.50	0.050	mg/L		10/24/22 08:35	10/26/22 00:32	1
Beryllium	0.0058		0.0040	0.0040	mg/L		10/24/22 08:35	10/26/22 18:42	1
Boron	0.12		0.10	0.050	mg/L		10/24/22 08:35	10/26/22 00:32	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/24/22 08:35	10/26/22 00:32	1
Calcium	24		2.5	0.50	mg/L		10/24/22 08:35	10/26/22 00:32	1
Chromium	0.10		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:32	1
Cobalt	0.037		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:32	1
Iron	110		0.40	0.20	mg/L		10/24/22 08:35	10/26/22 00:32	1
Lead	0.095		0.0075	0.0075	mg/L		10/24/22 08:35	10/26/22 00:32	1
Manganese	0.56		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 18:42	1
Nickel	0.11		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:32	1
Potassium	24		2.5	0.50	mg/L		10/24/22 08:35	10/26/22 00:32	1
Selenium	<0.050		0.050	0.020	mg/L		10/24/22 08:35	10/26/22 00:32	1
Silver	<0.025		0.025	0.010	mg/L		10/24/22 08:35	10/26/22 00:32	1
Zinc	0.37	J	0.50	0.020	mg/L		10/24/22 08:35	10/26/22 00:32	1

**Method: SW846 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		10/24/22 08:31	10/27/22 18:08	1

**Method: SW846 6020A - Metals (ICP/MS) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/24/22 08:35	10/26/22 22:42	1
Thallium	0.0032		0.0020	0.0020	mg/L		10/24/22 08:35	10/26/22 22:42	1

**Method: SW846 7470A - Mercury (CVAA) - SPLP East**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/27/22 11:15	10/28/22 13:59	1

**Method: SW846 7471B - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044		0.018	0.0060	mg/Kg	☆	10/26/22 07:45	10/26/22 15:03	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.25	J	0.61	0.23	mg/Kg	☆	10/27/22 16:36	10/27/22 17:56	1
pH (SW846 9045D)	8.0		0.2	0.2	SU			10/20/22 16:06	1



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*3	ISTD response or retention time outside acceptable limits.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

### Metals

Qualifier	Qualifier Description
^	Continuing Calibration Verification (CCV) is outside acceptance limits, low biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent

Eurofins Chicago

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

## Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-003

Job ID: 500-223815-1

## Laboratory: Eurofins Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Illinois	NELAP	IL00035	04-30-23

## Laboratory: Eurofins Canton

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-27-23
Connecticut	State	PH-0590	12-31-23
Florida	NELAP	E87225	06-30-23
Georgia	State	4062	02-27-23
Illinois	NELAP	200004	07-31-23
Iowa	State	421	06-01-23
Kentucky (UST)	State	112225	02-27-23
Kentucky (WW)	State	KY98016	12-31-22
Minnesota	NELAP	039-999-348	12-31-22
Minnesota (Petrofund)	State	3506	08-01-23
New Jersey	NELAP	OH001	06-30-23
New York	NELAP	10975	04-01-23
Ohio	State	8303	02-27-23
Ohio VAP	State	CL0024	02-27-23
Oregon	NELAP	4062	02-27-23
Pennsylvania	NELAP	68-00340	08-31-23
Texas	NELAP	T104704517-22-17	08-31-23
Virginia	NELAP	460175	09-14-23
Washington	State	C971	01-12-23
West Virginia DEP	State	210	12-31-22





