



# 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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

421-439 Ashley Avenue, 415-451 9th Avenue and 421-439 Filson Street, (Northwest corner of 47th St. and Bluff Ave.)

City: La Grange State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80551 Longitude: -87.86291  
(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.): 90

### 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 2852V-2-B01 WAS SAMPLED ADJACENT TO SITE 2852V-2. SEE TABLE 3a 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: 500-228080-1.

**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 5, 2023  
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 2852V-2**  
**Mason Pointe**  
**Development**

Sample ID	2852V-2-B01-1	2852V-2-B01-2	Maximum Allowable Concentration				
Sample Depth (ft)	0-7.5	7.5-15					
Sample Date	1/13/2023	1/13/2023					
PID	0	0					
Sample pH	7.5	8.3					
Matrix	Soil	Soil	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area
<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 1/30/2023 11:41:31 AM

**JOB DESCRIPTION**

IDOT - AE8-007

**JOB NUMBER**

500-228080-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
1/30/2023 11:41:31 AM

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228080-1

**Client Sample ID: 2852V-2-B01-1**

**Lab Sample ID: 500-228080-1**

**Date Collected: 01/13/23 13:55**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**Percent Solids: 82.6**

**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	0.00058	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00056	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00075	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
1,1-Dichloroethane	<0.0017		0.0017	0.00060	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Acetone	<0.017		0.017	0.0076	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00049	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Methylene Chloride	<0.0043	+	0.0043	0.0017	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Styrene	<0.0017		0.0017	0.00053	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☆	01/13/23 17:33	01/20/23 16:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	01/13/23 17:33	01/20/23 16:30	1
4-Bromofluorobenzene (Surr)	93		75 - 131	01/13/23 17:33	01/20/23 16:30	1
Dibromofluoromethane	82		75 - 126	01/13/23 17:33	01/20/23 16:30	1
Toluene-d8 (Surr)	91		75 - 124	01/13/23 17:33	01/20/23 16:30	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	☆	01/20/23 07:31	01/20/23 18:41	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☆	01/20/23 07:31	01/20/23 18:41	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☆	01/20/23 07:31	01/20/23 18:41	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☆	01/20/23 07:31	01/20/23 18:41	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☆	01/20/23 07:31	01/20/23 18:41	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228080-1

**Client Sample ID: 2852V-2-B01-1**

**Lab Sample ID: 500-228080-1**

**Date Collected: 01/13/23 13:55**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**Percent Solids: 82.6**

**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	☼	01/20/23 07:31	01/20/23 18:41	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
2-Chlorophenol	<0.20	*+	0.20	0.067	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Benzo[g,h,i]perylene	<0.039	*-	0.039	0.013	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	01/20/23 07:31	01/20/23 18:41	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228080-1

**Client Sample ID: 2852V-2-B01-1**

**Lab Sample ID: 500-228080-1**

Date Collected: 01/13/23 13:55

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 82.6

**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		0.039	0.010	mg/Kg	✱	01/20/23 07:31	01/20/23 18:41	1
Isophorone	<0.20		0.20	0.044	mg/Kg	✱	01/20/23 07:31	01/20/23 18:41	1
<b>Naphthalene</b>	<b>0.0075</b>	<b>J</b>	0.039	0.0060	mg/Kg	✱	01/20/23 07:31	01/20/23 18:41	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	✱	01/20/23 07:31	01/20/23 18:41	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	✱	01/20/23 07:31	01/20/23 18:41	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	✱	01/20/23 07:31	01/20/23 18:41	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	✱	01/20/23 07:31	01/20/23 18:41	1
<b>Phenanthrene</b>	<b>0.0079</b>	<b>J</b>	0.039	0.0055	mg/Kg	✱	01/20/23 07:31	01/20/23 18:41	1
Phenol	<0.20		0.20	0.087	mg/Kg	✱	01/20/23 07:31	01/20/23 18:41	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	✱	01/20/23 07:31	01/20/23 18:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	90		31 - 143				01/20/23 07:31	01/20/23 18:41	1
2-Fluorobiphenyl	82		43 - 145				01/20/23 07:31	01/20/23 18:41	1
2-Fluorophenol	132		31 - 166				01/20/23 07:31	01/20/23 18:41	1
Nitrobenzene-d5 (Surr)	76		37 - 147				01/20/23 07:31	01/20/23 18:41	1
Phenol-d5	111		30 - 153				01/20/23 07:31	01/20/23 18:41	1
Terphenyl-d14 (Surr)	90		42 - 157				01/20/23 07:31	01/20/23 18:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.54</b>	<b>J</b>	1.2	0.23	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Arsenic</b>	<b>7.9</b>		0.60	0.20	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Barium</b>	<b>67</b>		0.60	0.068	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Beryllium</b>	<b>0.95</b>		0.24	0.056	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Boron</b>	<b>10</b>		3.0	0.28	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Cadmium</b>	<b>0.12</b>		0.12	0.022	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Calcium</b>	<b>2600</b>		12	2.0	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Chromium</b>	<b>24</b>		0.60	0.30	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Cobalt</b>	<b>12</b>	<b>^1+</b>	0.30	0.078	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Copper</b>	<b>24</b>		0.60	0.17	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Iron</b>	<b>25000</b>	<b>B</b>	12	6.2	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Lead</b>	<b>14</b>		0.30	0.14	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Magnesium</b>	<b>5700</b>		6.0	3.0	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Manganese</b>	<b>230</b>		0.60	0.087	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Nickel</b>	<b>37</b>		0.60	0.17	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Potassium</b>	<b>2600</b>		30	11	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
Selenium	<0.60		0.60	0.35	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Silver</b>	<b>0.42</b>		0.30	0.077	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Sodium</b>	<b>100</b>		60	8.9	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Thallium</b>	<b>0.38</b>	<b>J</b>	0.60	0.30	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Vanadium</b>	<b>26</b>		0.30	0.071	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	1
<b>Zinc</b>	<b>75</b>		1.2	0.53	mg/Kg	✱	01/20/23 09:30	01/24/23 00:55	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		01/26/23 17:59	01/27/23 15:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/26/23 17:59	01/27/23 15:59	1
Chromium	<0.025		0.025	0.010	mg/L		01/26/23 17:59	01/27/23 15:59	1
<b>Iron</b>	<b>0.26</b>	<b>J</b>	0.40	0.20	mg/L		01/26/23 17:59	01/27/23 15:59	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228080-1

**Client Sample ID: 2852V-2-B01-1**

**Lab Sample ID: 500-228080-1**

Date Collected: 01/13/23 13:55

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 82.6

**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		01/26/23 17:59	01/27/23 15:59	1
<b>Manganese</b>	<b>0.015</b>	<b>J</b>	0.025	0.010	mg/L		01/26/23 17:59	01/27/23 15:59	1
Nickel	<0.025		0.025	0.010	mg/L		01/26/23 17:59	01/27/23 15:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.090</b>		0.050	0.010	mg/L		01/26/23 18:01	01/27/23 15:11	1
<b>Barium</b>	<b>0.66</b>		0.50	0.050	mg/L		01/26/23 18:01	01/27/23 15:11	1
<b>Beryllium</b>	<b>0.0089</b>		0.0040	0.0040	mg/L		01/26/23 18:01	01/27/23 15:11	1
<b>Boron</b>	<b>0.21</b>		0.10	0.050	mg/L		01/26/23 18:01	01/27/23 15:11	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/26/23 18:01	01/27/23 15:11	1
<b>Calcium</b>	<b>23</b>		2.5	0.50	mg/L		01/26/23 18:01	01/27/23 15:11	1
<b>Chromium</b>	<b>0.19</b>		0.025	0.010	mg/L		01/26/23 18:01	01/27/23 15:11	1
<b>Cobalt</b>	<b>0.056</b>		0.025	0.010	mg/L		01/26/23 18:01	01/27/23 15:11	1
<b>Iron</b>	<b>220</b>		0.40	0.20	mg/L		01/26/23 18:01	01/27/23 15:11	1
<b>Lead</b>	<b>0.096</b>		0.0075	0.0075	mg/L		01/26/23 18:01	01/27/23 15:11	1
<b>Manganese</b>	<b>0.67</b>		0.025	0.010	mg/L		01/26/23 18:01	01/27/23 15:11	1
<b>Nickel</b>	<b>0.24</b>		0.025	0.010	mg/L		01/26/23 18:01	01/27/23 15:11	1
<b>Potassium</b>	<b>26</b>		2.5	0.50	mg/L		01/26/23 18:01	01/27/23 15:11	1
Selenium	<0.050		0.050	0.020	mg/L		01/26/23 18:01	01/27/23 15:11	1
Silver	<0.025		0.025	0.010	mg/L		01/26/23 18:01	01/27/23 15:11	1
<b>Zinc</b>	<b>0.51</b>		0.50	0.020	mg/L		01/26/23 18:01	01/27/23 15:11	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		01/26/23 17:59	01/27/23 13:54	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		01/26/23 18:01	01/27/23 12:59	1
<b>Thallium</b>	<b>0.0037</b>		0.0020	0.0020	mg/L		01/26/23 18:01	01/27/23 12:59	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		01/26/23 15:55	01/27/23 09:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.027</b>		0.018	0.0096	mg/Kg	✱	01/23/23 16:30	01/24/23 09:20	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.40</b>	<b>J</b>	0.61	0.23	mg/Kg	✱	01/19/23 11:41	01/19/23 12:48	1
<b>pH (SW846 9045D)</b>	<b>7.5</b>		0.2	0.2	SU			01/19/23 19:48	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228080-1

**Client Sample ID: 2852V-2-B01-2**

**Lab Sample ID: 500-228080-2**

Date Collected: 01/13/23 14:00

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 81.9

**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	0.00066	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00084	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
1,1-Dichloroethane	<0.0020		0.0020	0.00067	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
1,1-Dichloroethene	<0.0020		0.0020	0.00067	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0014	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Acetone	<0.020		0.020	0.0085	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Bromoform	<0.0020		0.0020	0.00057	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Bromomethane	<0.0049		0.0049	0.0019	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Chlorobenzene	<0.0020		0.0020	0.00072	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Chloroethane	<0.0049		0.0049	0.0014	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Dibromochloromethane	<0.0020		0.0020	0.00064	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00057	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Methylene Chloride	<0.0049	+	0.0049	0.0019	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Styrene	<0.0020		0.0020	0.00059	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Toluene	<0.0020		0.0020	0.00049	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Trichloroethene	<0.0020		0.0020	0.00066	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	✱	01/13/23 17:33	01/20/23 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	01/13/23 17:33	01/20/23 16:56	1
4-Bromofluorobenzene (Surr)	94		75 - 131	01/13/23 17:33	01/20/23 16:56	1
Dibromofluoromethane	82		75 - 126	01/13/23 17:33	01/20/23 16:56	1
Toluene-d8 (Surr)	90		75 - 124	01/13/23 17:33	01/20/23 16:56	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	✱	01/20/23 07:31	01/20/23 19:04	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228080-1

**Client Sample ID: 2852V-2-B01-2**

**Lab Sample ID: 500-228080-2**

Date Collected: 01/13/23 14:00

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 81.9

**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	0.092	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
2,4-Dinitrophenol	<0.82		0.82	0.71	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
2-Chlorophenol	<0.20	*+	0.20	0.069	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
2-Methylnaphthalene	<0.082		0.082	0.0074	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.32	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
4-Nitrophenol	<0.82		0.82	0.38	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
<b>Benzo[b]fluoranthene</b>	<b>0.010</b>	<b>J</b>	0.040	0.0087	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Benzo[g,h,i]perylene	<0.040	*-	0.040	0.013	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Carbazole	<0.20		0.20	0.10	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
<b>Chrysene</b>	<b>0.016</b>	<b>J</b>	0.040	0.011	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
<b>Fluoranthene</b>	<b>0.0075</b>	<b>J</b>	0.040	0.0075	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	✱	01/20/23 07:31	01/20/23 19:04	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228080-1

**Client Sample ID: 2852V-2-B01-2**

**Lab Sample ID: 500-228080-2**

Date Collected: 01/13/23 14:00

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 81.9

**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	<0.040		0.040	0.010	mg/Kg	✳	01/20/23 07:31	01/20/23 19:04	1
Isophorone	<0.20		0.20	0.045	mg/Kg	✳	01/20/23 07:31	01/20/23 19:04	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	✳	01/20/23 07:31	01/20/23 19:04	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	✳	01/20/23 07:31	01/20/23 19:04	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.049	mg/Kg	✳	01/20/23 07:31	01/20/23 19:04	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	✳	01/20/23 07:31	01/20/23 19:04	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	✳	01/20/23 07:31	01/20/23 19:04	1
<b>Phenanthrene</b>	<b>0.0091</b>	<b>J</b>	0.040	0.0056	mg/Kg	✳	01/20/23 07:31	01/20/23 19:04	1
Phenol	<0.20		0.20	0.090	mg/Kg	✳	01/20/23 07:31	01/20/23 19:04	1
<b>Pyrene</b>	<b>0.014</b>	<b>J</b>	0.040	0.0080	mg/Kg	✳	01/20/23 07:31	01/20/23 19:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	83		31 - 143				01/20/23 07:31	01/20/23 19:04	1
2-Fluorobiphenyl	81		43 - 145				01/20/23 07:31	01/20/23 19:04	1
2-Fluorophenol	121		31 - 166				01/20/23 07:31	01/20/23 19:04	1
Nitrobenzene-d5 (Surr)	76		37 - 147				01/20/23 07:31	01/20/23 19:04	1
Phenol-d5	100		30 - 153				01/20/23 07:31	01/20/23 19:04	1
Terphenyl-d14 (Surr)	95		42 - 157				01/20/23 07:31	01/20/23 19:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.43</b>	<b>J</b>	1.2	0.23	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Arsenic</b>	<b>7.4</b>		0.58	0.20	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Barium</b>	<b>56</b>		0.58	0.066	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Beryllium</b>	<b>0.82</b>		0.23	0.054	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Boron</b>	<b>14</b>		2.9	0.27	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Cadmium</b>	<b>0.15</b>		0.12	0.021	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Calcium</b>	<b>120000</b>		58	9.8	mg/Kg	✳	01/20/23 09:30	01/24/23 21:09	5
<b>Chromium</b>	<b>20</b>		0.58	0.29	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Cobalt</b>	<b>14</b>	<b>^1+</b>	0.29	0.076	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Copper</b>	<b>22</b>		0.58	0.16	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Iron</b>	<b>20000</b>	<b>B</b>	12	6.0	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Lead</b>	<b>12</b>		0.29	0.13	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Magnesium</b>	<b>22000</b>		5.8	2.9	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Manganese</b>	<b>430</b>		0.58	0.084	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Nickel</b>	<b>37</b>		0.58	0.17	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Potassium</b>	<b>3000</b>		29	10	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
Selenium	<0.58		0.58	0.34	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Silver</b>	<b>0.25</b>	<b>J</b>	0.29	0.075	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Sodium</b>	<b>160</b>		58	8.6	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
Thallium	<0.58		0.58	0.29	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Vanadium</b>	<b>23</b>		0.29	0.068	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	1
<b>Zinc</b>	<b>55</b>		1.2	0.51	mg/Kg	✳	01/20/23 09:30	01/24/23 00:58	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		01/26/23 17:59	01/27/23 16:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/26/23 17:59	01/27/23 16:02	1
Iron	<0.40		0.40	0.20	mg/L		01/26/23 17:59	01/27/23 16:02	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/26/23 17:59	01/27/23 16:02	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228080-1

**Client Sample ID: 2852V-2-B01-2**

**Lab Sample ID: 500-228080-2**

Date Collected: 01/13/23 14:00

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 81.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.57		0.025	0.010	mg/L		01/26/23 17:59	01/27/23 16:02	1
Nickel	<0.025		0.025	0.010	mg/L		01/26/23 17:59	01/27/23 16:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.067		0.050	0.010	mg/L		01/26/23 18:01	01/27/23 15:14	1
Barium	0.31	J	0.50	0.050	mg/L		01/26/23 18:01	01/27/23 15:14	1
Beryllium	0.0049		0.0040	0.0040	mg/L		01/26/23 18:01	01/27/23 15:14	1
Boron	0.077	J	0.10	0.050	mg/L		01/26/23 18:01	01/27/23 15:14	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/26/23 18:01	01/27/23 15:14	1
Calcium	54		2.5	0.50	mg/L		01/26/23 18:01	01/27/23 15:14	1
Chromium	0.092		0.025	0.010	mg/L		01/26/23 18:01	01/27/23 15:14	1
Cobalt	0.031		0.025	0.010	mg/L		01/26/23 18:01	01/27/23 15:14	1
Iron	120		0.40	0.20	mg/L		01/26/23 18:01	01/27/23 15:14	1
Lead	0.058		0.0075	0.0075	mg/L		01/26/23 18:01	01/27/23 15:14	1
Manganese	0.53		0.025	0.010	mg/L		01/26/23 18:01	01/27/23 15:14	1
Nickel	0.14		0.025	0.010	mg/L		01/26/23 18:01	01/27/23 15:14	1
Potassium	14		2.5	0.50	mg/L		01/26/23 18:01	01/27/23 15:14	1
Selenium	<0.050		0.050	0.020	mg/L		01/26/23 18:01	01/27/23 15:14	1
Silver	<0.025		0.025	0.010	mg/L		01/26/23 18:01	01/27/23 15:14	1
Zinc	0.28	J	0.50	0.020	mg/L		01/26/23 18:01	01/27/23 15:14	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		01/26/23 18:01	01/27/23 13:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/26/23 18:01	01/27/23 13:01	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		01/26/23 15:55	01/27/23 09:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.014	J	0.019	0.0099	mg/Kg	☆	01/23/23 16:30	01/24/23 09:22	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.61		0.61	0.23	mg/Kg	☆	01/19/23 11:42	01/19/23 12:50	1
pH (SW846 9045D)	8.3		0.2	0.2	SU			01/19/23 19:51	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228080-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

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

### Metals

Qualifier	Qualifier Description
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

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

## Glossary

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

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228080-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	01-19-23



# CHAIN OF CUSTODY RECORD



500-228080 COC

<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 <del>TekLab, Inc.</del> <b>BuroTing</b> Address <del>5445 Horseshoe Lake Road</del> <b>Collinsville, IL 62234</b> Phone: <del>877-344-1883</del> Contact <b>Shelly Hennessy</b> email <del>shennessy@teklabinc.com</del>	Project Name <b>AE8-007A</b> Project No <b>PTB/WO. 195-002/07A</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>N. Crow / S. Kenndner</b>	No <b>1</b> of <b>1</b> Lab Job No <b>500-228080</b> Sample Temp <b>4.3 → 3.4</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
1	2852V-2-801-1	1/13	1355	S	X	X					X	X	X	X	X					
2	2852V-2-801-2	1/13	1400		X	X					X	X	X	X	X					

Relinquished by <i>Ann Crow</i>	Date/Time <i>1/13 1510</i>	Received by <i>P. Noel</i>	Date/Time <i>1/13/23 1510</i>
Relinquished by <i>N. Crow</i>	Date/Time <i>1/13/23 1615</i>	Received by <i>Stephanie Hammond</i>	Date/Time <i>1/13/23 1415</i>
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

<b>Client Information (Sub Contract Lab)</b>		Sampler: Lab PM: Wright, Richard		Carrier Tracking No(s):		COC No: 500-169792.1											
Client Contact: Shipping/Receiving		Phone: E-Mail: Richard.Wright@et.eurofinsus.com		State of Origin: Illinois		Page: Page 1 of 1											
Company: Eurofins Environment Testing North Cent				Accreditations Required (See note): NELAP - Illinois		Job #: 500-228080-1											
Address: 180 S. Van Buren Avenue,		Due Date Requested: 1/26/2023		<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: Barberton		TAT Requested (days):															
State, Zip: OH, 44203		PO #:		Field Filtered Sample (Yes or No)				Total Number of containers									
Phone: 330-497-9396(Tel) 330-497-0772(Fax)		WO #:															
Email:		Project #: 50021033		Perform MS/MSD (Yes or No)				9012B/9012B_Prep Cyanide, Total									
Project Name: IDOT - AE8-007		SSOW#:															
Site:																	
<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>Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)</b>		<b>Field Filtered Sample (Yes or No)</b>		<b>Perform MS/MSD (Yes or No)</b>		<b>Total Number of containers</b>		<b>Special Instructions/Note:</b>	
																E169	
2852V-2-B01-1 (500-228080-1)		1/13/23		13:55 Central		Solid				X				1			
2852V-2-B01-2 (500-228080-2)		1/13/23		14:00 Central		Solid				X				1			

Page 37 of 40

1/30/2023

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>And 2 Ward</i>		Date/Time: 1/16/23 13:40		Company:		Received by: <i>[Signature]</i>	
Relinquished by:		Date/Time:		Company:		Date/Time: 1-17-23 0915	
Relinquished by:		Date/Time:		Company:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:			





# 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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

600 block of East 47th Street (southwest quadrant of 47th Street and East Avenue)

City: La Grange State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80426 Longitude: -87.86099  
(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.): 330

### 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 2852V-3-B01, 2852V-3-B05 AND 2852V-3-B06 WERE SAMPLED ADJACENT TO SITE 2852V-3. SEE TABLE 3b AND FIGURES 3 AND 10 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: 500-228083-1.

**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 5, 2023  
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 2852V-3  
Sedgwick Park**

Sample ID	2852V-3-B01-1	2852V-3-B01-2	2852V-3-B05-1	2852V-3-B05-2	2852V-3-B05-2 DUP	Maximum Allowable Concentration				
Sample Depth (ft)	0-6	6-12	0-6	6-12	6-12	<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	1/13/2023	1/13/2023	1/13/2023	1/13/2023	1/13/2023					
PID	0	0	0	0	0					
Sample pH	8.3	8.3	7.7	8.6	8					
Matrix	Soil	Soil	Soil	Soil	Soil					
<b>No Contaminants of Concern Noted.</b>										

Sample ID	2852V-3-B06-1	2852V-3-B06-2	Maximum Allowable Concentration				
Sample Depth (ft)	0-6	6-12	<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	1/13/2023	1/13/2023					
PID	0	0					
Sample pH	8.2	8.3					
Matrix	Soil	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 1/31/2023 12:14:44 PM

## JOB DESCRIPTION

IDOT - AE8-007

## JOB NUMBER

500-228083-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
1/31/2023 12:14:44 PM

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B01-1**

**Lab Sample ID: 500-228083-1**

**Date Collected: 01/13/23 09:00**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**Percent Solids: 83.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
<b>Acetone</b>	<b>0.0086</b>	<b>J</b>	0.018	0.0077	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1
Xylenes, Total	<0.0035		0.0035	0.00057	mg/Kg	☆	01/13/23 17:33	01/22/23 13:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		70 - 134	01/13/23 17:33	01/22/23 13:19	1
4-Bromofluorobenzene (Surr)	94		75 - 131	01/13/23 17:33	01/22/23 13:19	1
Dibromofluoromethane	84		75 - 126	01/13/23 17:33	01/22/23 13:19	1
Toluene-d8 (Surr)	90		75 - 124	01/13/23 17:33	01/22/23 13:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☆	01/23/23 13:35	01/24/23 12:20	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☆	01/23/23 13:35	01/24/23 12:20	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☆	01/23/23 13:35	01/24/23 12:20	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☆	01/23/23 13:35	01/24/23 12:20	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☆	01/23/23 13:35	01/24/23 12:20	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B01-1**

**Lab Sample ID: 500-228083-1**

**Date Collected: 01/13/23 09:00**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**Percent Solids: 83.3**

**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	0.091	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
4-Chloro-3-methylphenol	<0.39		0.39	0.14	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Carbazole	<0.20		0.20	0.099	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Chrysene	<0.039		0.039	0.011	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Fluoranthene	<0.039		0.039	0.0074	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B01-1**

**Lab Sample ID: 500-228083-1**

**Date Collected: 01/13/23 09:00**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**Percent Solids: 83.3**

**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		0.039	0.010	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Isophorone	<0.20		0.20	0.045	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Phenol	<0.20		0.20	0.088	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1
Pyrene	<0.039		0.039	0.0079	mg/Kg	✱	01/23/23 13:35	01/24/23 12:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	66		31 - 143	01/23/23 13:35	01/24/23 12:20	1
2-Fluorobiphenyl	65		43 - 145	01/23/23 13:35	01/24/23 12:20	1
2-Fluorophenol	79		31 - 166	01/23/23 13:35	01/24/23 12:20	1
Nitrobenzene-d5 (Surr)	56		37 - 147	01/23/23 13:35	01/24/23 12:20	1
Phenol-d5	68		30 - 153	01/23/23 13:35	01/24/23 12:20	1
Terphenyl-d14 (Surr)	78		42 - 157	01/23/23 13:35	01/24/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.46	J	1.1	0.22	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Arsenic	5.7		0.57	0.20	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Barium	49		0.57	0.065	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Beryllium	0.88		0.23	0.053	mg/Kg	✱	01/19/23 10:35	01/25/23 22:29	1
Boron	12		2.9	0.27	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Cadmium	0.17	B	0.11	0.021	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Calcium	53000		23	3.9	mg/Kg	✱	01/19/23 10:35	01/25/23 20:31	2
Chromium	17		0.57	0.28	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Cobalt	16		0.29	0.075	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Copper	21	B	0.57	0.16	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Iron	20000		11	5.9	mg/Kg	✱	01/19/23 10:35	01/25/23 22:29	1
Lead	11		0.29	0.13	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Magnesium	23000	B	5.7	2.8	mg/Kg	✱	01/19/23 10:35	01/25/23 22:29	1
Manganese	330		0.57	0.083	mg/Kg	✱	01/19/23 10:35	01/25/23 22:29	1
Nickel	34		0.57	0.17	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Potassium	2800		29	10	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Selenium	<0.57		0.57	0.34	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Silver	0.34		0.29	0.074	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Sodium	210		57	8.5	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Thallium	0.40	J	0.57	0.29	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Vanadium	20		0.29	0.067	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	1
Zinc	70		1.1	0.50	mg/Kg	✱	01/19/23 10:35	01/24/23 23:27	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		01/26/23 17:58	01/27/23 20:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/26/23 17:58	01/27/23 20:53	1
Chromium	<0.025		0.025	0.010	mg/L		01/26/23 17:58	01/27/23 20:53	1
Iron	<0.40		0.40	0.20	mg/L		01/26/23 17:58	01/27/23 20:53	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B01-1**

**Lab Sample ID: 500-228083-1**

Date Collected: 01/13/23 09:00

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 83.3

**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		01/26/23 17:58	01/27/23 20:53	1
<b>Manganese</b>	<b>0.44</b>		0.025	0.010	mg/L		01/26/23 17:58	01/27/23 20:53	1
Nickel	<0.025		0.025	0.010	mg/L		01/26/23 17:58	01/27/23 20:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.084</b>		0.050	0.010	mg/L		01/26/23 18:00	01/27/23 15:47	1
<b>Barium</b>	<b>0.63</b>		0.50	0.050	mg/L		01/26/23 18:00	01/27/23 15:47	1
<b>Beryllium</b>	<b>0.0093</b>		0.0040	0.0040	mg/L		01/26/23 18:00	01/27/23 15:47	1
<b>Boron</b>	<b>0.19</b>		0.10	0.050	mg/L		01/26/23 18:00	01/27/23 15:47	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/26/23 18:00	01/27/23 15:47	1
<b>Calcium</b>	<b>94</b>		2.5	0.50	mg/L		01/26/23 18:00	01/27/23 15:47	1
<b>Chromium</b>	<b>0.19</b>		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 15:47	1
<b>Cobalt</b>	<b>0.062</b>		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 15:47	1
<b>Iron</b>	<b>200</b>		0.40	0.20	mg/L		01/26/23 18:00	01/27/23 15:47	1
<b>Lead</b>	<b>0.11</b>		0.0075	0.0075	mg/L		01/26/23 18:00	01/27/23 15:47	1
<b>Manganese</b>	<b>0.88</b>		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 15:47	1
<b>Nickel</b>	<b>0.25</b>		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 15:47	1
<b>Potassium</b>	<b>38</b>		2.5	0.50	mg/L		01/26/23 18:00	01/27/23 15:47	1
Selenium	<0.050		0.050	0.020	mg/L		01/26/23 18:00	01/27/23 15:47	1
Silver	<0.025		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 15:47	1
<b>Zinc</b>	<b>0.54</b>		0.50	0.020	mg/L		01/26/23 18:00	01/27/23 15:47	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		01/26/23 17:58	01/27/23 13:32	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		01/26/23 18:00	01/27/23 12:00	1
<b>Thallium</b>	<b>0.0035</b>		0.0020	0.0020	mg/L		01/26/23 18:00	01/27/23 12:00	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		01/26/23 15:55	01/27/23 09:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.029</b>		0.018	0.0096	mg/Kg	✱	01/24/23 13:40	01/25/23 07:27	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.22</b>	<b>J</b>	0.58	0.22	mg/Kg	✱	01/19/23 11:54	01/19/23 13:26	1
<b>pH (SW846 9045D)</b>	<b>8.3</b>		0.2	0.2	SU			01/19/23 20:13	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B01-2**

**Lab Sample ID: 500-228083-2**

**Date Collected: 01/13/23 09:10**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**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	<0.0017		0.0017	0.00058	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Acetone	<0.017		0.017	0.0075	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	✱	01/13/23 17:33	01/22/23 13:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	01/13/23 17:33	01/22/23 13:45	1
4-Bromofluorobenzene (Surr)	99		75 - 131	01/13/23 17:33	01/22/23 13:45	1
Dibromofluoromethane	83		75 - 126	01/13/23 17:33	01/22/23 13:45	1
Toluene-d8 (Surr)	92		75 - 124	01/13/23 17:33	01/22/23 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	<0.20		0.20	0.042	mg/Kg	✱	01/23/23 13:35	01/24/23 12:42	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	✱	01/23/23 13:35	01/24/23 12:42	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	✱	01/23/23 13:35	01/24/23 12:42	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	✱	01/23/23 13:35	01/24/23 12:42	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	✱	01/23/23 13:35	01/24/23 12:42	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B01-2**

**Lab Sample ID: 500-228083-2**

**Date Collected: 01/13/23 09:10**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**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	<0.39		0.39	0.089	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
<b>2-Methylnaphthalene</b>	<b>0.014</b>	<b>J</b>	0.079	0.0072	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.058	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Carbazole	<0.20		0.20	0.097	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Chrysene	<0.039		0.039	0.011	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	✳	01/23/23 13:35	01/24/23 12:42	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B01-2**

**Lab Sample ID: 500-228083-2**

Date Collected: 01/13/23 09:10

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 83.0

**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	<0.039		0.039	0.010	mg/Kg	✱	01/23/23 13:35	01/24/23 12:42	1
Isophorone	<0.20		0.20	0.044	mg/Kg	✱	01/23/23 13:35	01/24/23 12:42	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	✱	01/23/23 13:35	01/24/23 12:42	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	✱	01/23/23 13:35	01/24/23 12:42	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	✱	01/23/23 13:35	01/24/23 12:42	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	✱	01/23/23 13:35	01/24/23 12:42	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	✱	01/23/23 13:35	01/24/23 12:42	1
<b>Phenanthrene</b>	<b>0.022</b>	<b>J</b>	0.039	0.0054	mg/Kg	✱	01/23/23 13:35	01/24/23 12:42	1
Phenol	<0.20		0.20	0.087	mg/Kg	✱	01/23/23 13:35	01/24/23 12:42	1
<b>Pyrene</b>	<b>0.0092</b>	<b>J</b>	0.039	0.0078	mg/Kg	✱	01/23/23 13:35	01/24/23 12:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	75		31 - 143				01/23/23 13:35	01/24/23 12:42	1
2-Fluorobiphenyl	84		43 - 145				01/23/23 13:35	01/24/23 12:42	1
2-Fluorophenol	99		31 - 166				01/23/23 13:35	01/24/23 12:42	1
Nitrobenzene-d5 (Surr)	68		37 - 147				01/23/23 13:35	01/24/23 12:42	1
Phenol-d5	85		30 - 153				01/23/23 13:35	01/24/23 12:42	1
Terphenyl-d14 (Surr)	103		42 - 157				01/23/23 13:35	01/24/23 12:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.40</b>	<b>J</b>	1.2	0.23	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Arsenic</b>	<b>5.8</b>		0.58	0.20	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Barium</b>	<b>34</b>		0.58	0.066	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Beryllium</b>	<b>0.76</b>		0.23	0.054	mg/Kg	✱	01/19/23 10:35	01/25/23 22:33	1
<b>Boron</b>	<b>13</b>		2.9	0.27	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Cadmium</b>	<b>0.17</b>	<b>B</b>	0.12	0.021	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Calcium</b>	<b>58000</b>		23	4.0	mg/Kg	✱	01/19/23 10:35	01/25/23 20:34	2
<b>Chromium</b>	<b>16</b>		0.58	0.29	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Cobalt</b>	<b>12</b>		0.29	0.076	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Copper</b>	<b>25</b>	<b>B</b>	0.58	0.16	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Iron</b>	<b>18000</b>		12	6.1	mg/Kg	✱	01/19/23 10:35	01/25/23 22:33	1
<b>Lead</b>	<b>12</b>		0.29	0.13	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Magnesium</b>	<b>24000</b>	<b>B</b>	5.8	2.9	mg/Kg	✱	01/19/23 10:35	01/25/23 22:33	1
<b>Manganese</b>	<b>320</b>		0.58	0.084	mg/Kg	✱	01/19/23 10:35	01/25/23 22:33	1
<b>Nickel</b>	<b>33</b>		0.58	0.17	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Potassium</b>	<b>2900</b>		29	10	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Selenium</b>	<b>0.42</b>	<b>J</b>	0.58	0.34	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Silver</b>	<b>0.35</b>		0.29	0.075	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Sodium</b>	<b>220</b>		58	8.6	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Thallium</b>	<b>0.47</b>	<b>J</b>	0.58	0.29	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Vanadium</b>	<b>21</b>		0.29	0.069	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	1
<b>Zinc</b>	<b>51</b>		1.2	0.51	mg/Kg	✱	01/19/23 10:35	01/24/23 23:30	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		01/26/23 17:58	01/27/23 19:27	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/26/23 17:58	01/27/23 19:27	1
<b>Manganese</b>	<b>0.86</b>		0.025	0.010	mg/L		01/26/23 17:58	01/27/23 19:27	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B01-2**

**Lab Sample ID: 500-228083-2**

Date Collected: 01/13/23 09:10

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		01/26/23 18:00	01/27/23 15:50	1
<b>Barium</b>	<b>0.25</b>	<b>J</b>	0.50	0.050	mg/L		01/26/23 18:00	01/27/23 15:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/26/23 18:00	01/27/23 15:50	1
<b>Boron</b>	<b>0.12</b>		0.10	0.050	mg/L		01/26/23 18:00	01/27/23 15:50	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/26/23 18:00	01/27/23 15:50	1
<b>Calcium</b>	<b>39</b>		2.5	0.50	mg/L		01/26/23 18:00	01/27/23 15:50	1
<b>Chromium</b>	<b>0.081</b>		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 15:50	1
<b>Cobalt</b>	<b>0.033</b>		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 15:50	1
<b>Iron</b>	<b>51</b>		0.40	0.20	mg/L		01/26/23 18:00	01/27/23 15:50	1
<b>Lead</b>	<b>0.036</b>		0.0075	0.0075	mg/L		01/26/23 18:00	01/27/23 15:50	1
<b>Manganese</b>	<b>0.35</b>		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 15:50	1
<b>Nickel</b>	<b>0.093</b>		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 15:50	1
<b>Potassium</b>	<b>22</b>		2.5	0.50	mg/L		01/26/23 18:00	01/27/23 15:50	1
Selenium	<0.050		0.050	0.020	mg/L		01/26/23 18:00	01/27/23 15:50	1
Silver	<0.025		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 15:50	1
<b>Zinc</b>	<b>0.13</b>	<b>J</b>	0.50	0.020	mg/L		01/26/23 18:00	01/27/23 15:50	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		01/26/23 18:00	01/27/23 12:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/26/23 18:00	01/27/23 12:02	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		01/26/23 15:55	01/27/23 09:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.024</b>		0.018	0.0095	mg/Kg	⊛	01/24/23 13:40	01/25/23 07:29	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.58		0.58	0.22	mg/Kg	⊛	01/19/23 11:55	01/19/23 13:27	1
<b>pH (SW846 9045D)</b>	<b>8.3</b>		0.2	0.2	SU			01/19/23 20:15	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B05-1**

**Lab Sample ID: 500-228083-9**

Date Collected: 01/13/23 11:40

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0024		0.0024	0.00079	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
1,1,2,2-Tetrachloroethane	<0.0024		0.0024	0.00076	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
1,1,2-Trichloroethane	<0.0024		0.0024	0.0010	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
1,1-Dichloroethane	<0.0024		0.0024	0.00081	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
1,1-Dichloroethene	<0.0024		0.0024	0.00081	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
1,2-Dichloroethane	<0.0059		0.0059	0.0018	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
1,2-Dichloropropane	<0.0024		0.0024	0.00061	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
1,3-Dichloropropene, Total	<0.0024		0.0024	0.00083	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
2-Butanone (MEK)	<0.0059		0.0059	0.0026	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
2-Hexanone	<0.0059		0.0059	0.0018	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
4-Methyl-2-pentanone (MIBK)	<0.0059		0.0059	0.0018	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Acetone	<0.024		0.024	0.010	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Benzene	<0.0024		0.0024	0.00060	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Bromodichloromethane	<0.0024		0.0024	0.00048	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Bromoform	<0.0024		0.0024	0.00069	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Bromomethane	<0.0059		0.0059	0.0022	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Carbon disulfide	<0.0059		0.0059	0.0012	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Carbon tetrachloride	<0.0024		0.0024	0.00069	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Chlorobenzene	<0.0024		0.0024	0.00087	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Chloroethane	<0.0059		0.0059	0.0018	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
<b>Chloroform</b>	<b>0.0014</b>	<b>J</b>	0.0024	0.00082	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Chloromethane	<0.0059		0.0059	0.0024	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
cis-1,2-Dichloroethene	<0.0024		0.0024	0.00066	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
cis-1,3-Dichloropropene	<0.0024		0.0024	0.00071	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Dibromochloromethane	<0.0024		0.0024	0.00077	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Ethylbenzene	<0.0024		0.0024	0.0011	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Methyl tert-butyl ether	<0.0024		0.0024	0.00069	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Methylene Chloride	<0.0059		0.0059	0.0023	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Styrene	<0.0024		0.0024	0.00071	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Tetrachloroethene	<0.0024		0.0024	0.00081	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Toluene	<0.0024		0.0024	0.00060	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
trans-1,2-Dichloroethene	<0.0024		0.0024	0.0010	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
trans-1,3-Dichloropropene	<0.0024		0.0024	0.00083	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Trichloroethene	<0.0024		0.0024	0.00080	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Vinyl chloride	<0.0024		0.0024	0.0010	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1
Xylenes, Total	<0.0047		0.0047	0.00076	mg/Kg	✱	01/13/23 17:33	01/22/23 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	01/13/23 17:33	01/22/23 16:43	1
4-Bromofluorobenzene (Surr)	96		75 - 131	01/13/23 17:33	01/22/23 16:43	1
Dibromofluoromethane	82		75 - 126	01/13/23 17:33	01/22/23 16:43	1
Toluene-d8 (Surr)	89		75 - 124	01/13/23 17:33	01/22/23 16:43	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	0.042	mg/Kg	✱	01/23/23 13:35	01/24/23 15:11	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	✱	01/23/23 13:35	01/24/23 15:11	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	✱	01/23/23 13:35	01/24/23 15:11	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	✱	01/23/23 13:35	01/24/23 15:11	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	✱	01/23/23 13:35	01/24/23 15:11	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B05-1**

**Lab Sample ID: 500-228083-9**

**Date Collected: 01/13/23 11:40**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**Percent Solids: 82.3**

**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	✳	01/23/23 13:35	01/24/23 15:11	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Carbazole	<0.20		0.20	0.098	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Chrysene	<0.039		0.039	0.011	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Hexachlorobenzene	<0.079		0.079	0.0090	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	✳	01/23/23 13:35	01/24/23 15:11	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B05-1**

**Lab Sample ID: 500-228083-9**

**Date Collected: 01/13/23 11:40**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**Percent Solids: 82.3**

**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		0.039	0.010	mg/Kg	✱	01/23/23 13:35	01/24/23 15:11	1
Isophorone	<0.20		0.20	0.044	mg/Kg	✱	01/23/23 13:35	01/24/23 15:11	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	✱	01/23/23 13:35	01/24/23 15:11	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	✱	01/23/23 13:35	01/24/23 15:11	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	✱	01/23/23 13:35	01/24/23 15:11	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	✱	01/23/23 13:35	01/24/23 15:11	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	✱	01/23/23 13:35	01/24/23 15:11	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	✱	01/23/23 13:35	01/24/23 15:11	1
Phenol	<0.20		0.20	0.087	mg/Kg	✱	01/23/23 13:35	01/24/23 15:11	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	✱	01/23/23 13:35	01/24/23 15:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	61		31 - 143	01/23/23 13:35	01/24/23 15:11	1
2-Fluorobiphenyl	58		43 - 145	01/23/23 13:35	01/24/23 15:11	1
2-Fluorophenol	78		31 - 166	01/23/23 13:35	01/24/23 15:11	1
Nitrobenzene-d5 (Surr)	51		37 - 147	01/23/23 13:35	01/24/23 15:11	1
Phenol-d5	65		30 - 153	01/23/23 13:35	01/24/23 15:11	1
Terphenyl-d14 (Surr)	76		42 - 157	01/23/23 13:35	01/24/23 15:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.46	J	1.2	0.22	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Arsenic	6.5		0.58	0.20	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Barium	100		0.58	0.066	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Beryllium	1.1		0.23	0.054	mg/Kg	✱	01/19/23 10:35	01/25/23 23:06	1
Boron	9.8		2.9	0.27	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Cadmium	0.22	B	0.12	0.021	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Calcium	6400	B	12	2.0	mg/Kg	✱	01/19/23 10:35	01/25/23 23:06	1
Chromium	19		0.58	0.29	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Cobalt	13		0.29	0.076	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Copper	23	B	0.58	0.16	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Iron	24000		12	6.0	mg/Kg	✱	01/19/23 10:35	01/25/23 23:06	1
Lead	18		0.29	0.13	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Magnesium	6700	B	5.8	2.9	mg/Kg	✱	01/19/23 10:35	01/25/23 23:06	1
Manganese	230		0.58	0.084	mg/Kg	✱	01/19/23 10:35	01/25/23 23:06	1
Nickel	32		0.58	0.17	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Potassium	2000		29	10	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Selenium	<0.58		0.58	0.34	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Silver	0.43		0.29	0.074	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Sodium	210		58	8.5	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Thallium	0.38	J	0.58	0.29	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Vanadium	27		0.29	0.068	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	1
Zinc	65		1.2	0.51	mg/Kg	✱	01/19/23 10:35	01/25/23 00:03	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		01/26/23 17:58	01/27/23 19:50	1
Iron	<0.40		0.40	0.20	mg/L		01/26/23 17:58	01/27/23 19:50	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/26/23 17:58	01/27/23 19:50	1
Manganese	0.045		0.025	0.010	mg/L		01/26/23 17:58	01/27/23 19:50	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B05-1**

**Lab Sample ID: 500-228083-9**

Date Collected: 01/13/23 11:40

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.017	J	0.050	0.010	mg/L		01/26/23 18:00	01/27/23 16:18	1
Barium	0.37	J	0.50	0.050	mg/L		01/26/23 18:00	01/27/23 16:18	1
Beryllium	0.0042		0.0040	0.0040	mg/L		01/26/23 18:00	01/27/23 16:18	1
Boron	0.14		0.10	0.050	mg/L		01/26/23 18:00	01/27/23 16:18	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/26/23 18:00	01/27/23 16:18	1
Calcium	13		2.5	0.50	mg/L		01/26/23 18:00	01/27/23 16:18	1
Chromium	0.084		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:18	1
Cobalt	0.019	J	0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:18	1
Iron	82		0.40	0.20	mg/L		01/26/23 18:00	01/27/23 16:18	1
Lead	0.052		0.0075	0.0075	mg/L		01/26/23 18:00	01/27/23 16:18	1
Manganese	0.20		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:18	1
Nickel	0.076		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:18	1
Potassium	13		2.5	0.50	mg/L		01/26/23 18:00	01/27/23 16:18	1
Selenium	<0.050		0.050	0.020	mg/L		01/26/23 18:00	01/27/23 16:18	1
Silver	<0.025		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:18	1
Zinc	0.16	J	0.50	0.020	mg/L		01/26/23 18:00	01/27/23 16:18	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		01/26/23 18:00	01/27/23 12:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/26/23 18:00	01/27/23 12:21	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		01/26/23 15:55	01/27/23 10:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.019	0.010	mg/Kg	⊛	01/24/23 13:40	01/25/23 07:49	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.28	J B	0.63	0.24	mg/Kg	⊛	01/23/23 12:57	01/23/23 14:33	1
pH (SW846 9045D)	7.7		0.2	0.2	SU			01/19/23 20:30	1



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B05-2**

**Lab Sample ID: 500-228083-10**

Date Collected: 01/13/23 11:50

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 95.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00047	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00045	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00061	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
1,1-Dichloroethane	<0.0014		0.0014	0.00048	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
1,1-Dichloroethene	<0.0014		0.0014	0.00049	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
1,2-Dichloroethane	<0.0035		0.0035	0.0011	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00050	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
2-Butanone (MEK)	<0.0035		0.0035	0.0016	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
2-Hexanone	<0.0035		0.0035	0.0011	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
4-Methyl-2-pentanone (MIBK)	<0.0035		0.0035	0.0010	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Acetone	<0.014		0.014	0.0062	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Benzene	<0.0014		0.0014	0.00036	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Bromoform	<0.0014		0.0014	0.00041	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Bromomethane	<0.0035		0.0035	0.0013	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Carbon disulfide	<0.0035		0.0035	0.00074	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Carbon tetrachloride	<0.0014		0.0014	0.00041	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Chlorobenzene	<0.0014		0.0014	0.00052	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Chloroethane	<0.0035		0.0035	0.0010	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Chloroform	<0.0014		0.0014	0.00049	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Chloromethane	<0.0035		0.0035	0.0014	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00040	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00043	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Dibromochloromethane	<0.0014		0.0014	0.00046	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Ethylbenzene	<0.0014		0.0014	0.00068	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00041	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Methylene Chloride	<0.0035		0.0035	0.0014	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Styrene	<0.0014		0.0014	0.00043	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Tetrachloroethene	<0.0014		0.0014	0.00048	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Toluene	<0.0014		0.0014	0.00036	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00063	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00050	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Trichloroethene	<0.0014		0.0014	0.00048	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Vinyl chloride	<0.0014		0.0014	0.00063	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1
Xylenes, Total	<0.0028		0.0028	0.00045	mg/Kg	✱	01/13/23 17:33	01/22/23 17:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		70 - 134	01/13/23 17:33	01/22/23 17:09	1
4-Bromofluorobenzene (Surr)	93		75 - 131	01/13/23 17:33	01/22/23 17:09	1
Dibromofluoromethane	84		75 - 126	01/13/23 17:33	01/22/23 17:09	1
Toluene-d8 (Surr)	91		75 - 124	01/13/23 17:33	01/22/23 17:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg	✱	01/23/23 13:35	01/24/23 15:33	1
1,2-Dichlorobenzene	<0.17		0.17	0.039	mg/Kg	✱	01/23/23 13:35	01/24/23 15:33	1
1,3-Dichlorobenzene	<0.17		0.17	0.037	mg/Kg	✱	01/23/23 13:35	01/24/23 15:33	1
1,4-Dichlorobenzene	<0.17		0.17	0.042	mg/Kg	✱	01/23/23 13:35	01/24/23 15:33	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.038	mg/Kg	✱	01/23/23 13:35	01/24/23 15:33	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B05-2**

**Lab Sample ID: 500-228083-10**

**Date Collected: 01/13/23 11:50**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**Percent Solids: 95.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.33		0.33	0.075	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
2,4-Dichlorophenol	<0.33		0.33	0.078	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
2,4-Dinitrophenol	<0.67		0.67	0.58	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
2,4-Dinitrotoluene	<0.17		0.17	0.052	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
2-Chloronaphthalene	<0.17		0.17	0.036	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
2-Chlorophenol	<0.17		0.17	0.056	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
2-Methylnaphthalene	<0.067		0.067	0.0061	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
2-Nitroaniline	<0.17		0.17	0.044	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
2-Nitrophenol	<0.33		0.33	0.078	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.046	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
3-Nitroaniline	<0.33		0.33	0.10	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
4-Bromophenyl phenyl ether	<0.17		0.17	0.044	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
4-Chloro-3-methylphenol	<0.33		0.33	0.11	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
4-Chloroaniline	<0.67		0.67	0.15	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
4-Chlorophenyl phenyl ether	<0.17		0.17	0.039	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
4-Nitrophenol	<0.67		0.67	0.31	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Acenaphthene	<0.033		0.033	0.0059	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Anthracene	<0.033		0.033	0.0055	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Benzo[a]anthracene	<0.033		0.033	0.0044	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Benzo[b]fluoranthene	<0.033		0.033	0.0071	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Benzo[k]fluoranthene	<0.033		0.033	0.0097	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Bis(2-chloroethoxy)methane	<0.17		0.17	0.034	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.049	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.060	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Carbazole	<0.17		0.17	0.082	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Chrysene	<0.033		0.033	0.0090	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Di-n-butyl phthalate	<0.17		0.17	0.050	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Fluoranthene	<0.033		0.033	0.0061	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Fluorene	<0.033		0.033	0.0046	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1
Hexachloroethane	<0.17		0.17	0.050	mg/Kg	✳	01/23/23 13:35	01/24/23 15:33	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B05-2**

**Lab Sample ID: 500-228083-10**

Date Collected: 01/13/23 11:50

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 95.2

**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	<0.033		0.033	0.0086	mg/Kg	✱	01/23/23 13:35	01/24/23 15:33	1
Isophorone	<0.17		0.17	0.037	mg/Kg	✱	01/23/23 13:35	01/24/23 15:33	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg	✱	01/23/23 13:35	01/24/23 15:33	1
Nitrobenzene	<0.033		0.033	0.0082	mg/Kg	✱	01/23/23 13:35	01/24/23 15:33	1
N-Nitrosodi-n-propylamine	<0.067		0.067	0.040	mg/Kg	✱	01/23/23 13:35	01/24/23 15:33	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg	✱	01/23/23 13:35	01/24/23 15:33	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg	✱	01/23/23 13:35	01/24/23 15:33	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg	✱	01/23/23 13:35	01/24/23 15:33	1
Phenol	<0.17		0.17	0.073	mg/Kg	✱	01/23/23 13:35	01/24/23 15:33	1
Pyrene	<0.033		0.033	0.0066	mg/Kg	✱	01/23/23 13:35	01/24/23 15:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	66		31 - 143				01/23/23 13:35	01/24/23 15:33	1
2-Fluorobiphenyl	69		43 - 145				01/23/23 13:35	01/24/23 15:33	1
2-Fluorophenol	82		31 - 166				01/23/23 13:35	01/24/23 15:33	1
Nitrobenzene-d5 (Surr)	59		37 - 147				01/23/23 13:35	01/24/23 15:33	1
Phenol-d5	71		30 - 153				01/23/23 13:35	01/24/23 15:33	1
Terphenyl-d14 (Surr)	83		42 - 157				01/23/23 13:35	01/24/23 15:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1
<b>Arsenic</b>	<b>0.87</b>		0.52	0.18	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1
<b>Barium</b>	<b>8.6</b>		2.6	0.30	mg/Kg	✱	01/19/23 10:35	01/25/23 20:43	5
<b>Beryllium</b>	<b>0.21</b>		0.21	0.049	mg/Kg	✱	01/19/23 10:35	01/25/23 23:09	1
<b>Boron</b>	<b>9.1</b>		2.6	0.24	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1
<b>Cadmium</b>	<b>0.13</b>	<b>B</b>	0.10	0.019	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1
<b>Calcium</b>	<b>150000</b>		52	8.8	mg/Kg	✱	01/19/23 10:35	01/25/23 20:43	5
<b>Chromium</b>	<b>3.9</b>		0.52	0.26	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1
<b>Cobalt</b>	<b>1.8</b>		0.26	0.068	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1
<b>Copper</b>	<b>6.9</b>	<b>B</b>	0.52	0.15	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1
<b>Iron</b>	<b>5000</b>		52	27	mg/Kg	✱	01/19/23 10:35	01/25/23 20:43	5
<b>Lead</b>	<b>5.0</b>		0.26	0.12	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1
<b>Magnesium</b>	<b>96000</b>		26	13	mg/Kg	✱	01/19/23 10:35	01/25/23 20:43	5
<b>Manganese</b>	<b>100</b>		0.52	0.075	mg/Kg	✱	01/19/23 10:35	01/25/23 23:09	1
<b>Nickel</b>	<b>5.7</b>		0.52	0.15	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1
<b>Potassium</b>	<b>740</b>		26	9.2	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1
Selenium	<0.52		0.52	0.31	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1
<b>Silver</b>	<b>0.068</b>	<b>J</b>	0.26	0.067	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1
<b>Sodium</b>	<b>150</b>		52	7.7	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1
Thallium	<0.52		0.52	0.26	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1
<b>Vanadium</b>	<b>6.0</b>		0.26	0.061	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1
<b>Zinc</b>	<b>16</b>		1.0	0.46	mg/Kg	✱	01/19/23 10:35	01/25/23 00:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		01/26/23 17:58	01/27/23 20:00	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B05-2**

**Lab Sample ID: 500-228083-10**

Date Collected: 01/13/23 11:50

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 95.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		01/26/23 18:00	01/27/23 16:22	1
Barium	<0.50		0.50	0.050	mg/L		01/26/23 18:00	01/27/23 16:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/26/23 18:00	01/27/23 16:22	1
Boron	<0.10		0.10	0.050	mg/L		01/26/23 18:00	01/27/23 16:22	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/26/23 18:00	01/27/23 16:22	1
<b>Calcium</b>	<b>8.8</b>		2.5	0.50	mg/L		01/26/23 18:00	01/27/23 16:22	1
Chromium	<0.025		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:22	1
Cobalt	<0.025		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:22	1
<b>Iron</b>	<b>5.3</b>		0.40	0.20	mg/L		01/26/23 18:00	01/27/23 16:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/26/23 18:00	01/27/23 16:22	1
<b>Manganese</b>	<b>0.017</b>	<b>J</b>	0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:22	1
Nickel	<0.025		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:22	1
<b>Potassium</b>	<b>2.8</b>		2.5	0.50	mg/L		01/26/23 18:00	01/27/23 16:22	1
Selenium	<0.050		0.050	0.020	mg/L		01/26/23 18:00	01/27/23 16:22	1
Silver	<0.025		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:22	1
Zinc	<0.50		0.50	0.020	mg/L		01/26/23 18:00	01/27/23 16:22	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		01/26/23 18:00	01/27/23 12:23	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/26/23 18:00	01/27/23 12:23	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		01/26/23 15:55	01/27/23 10:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.015		0.015	0.0081	mg/Kg	⊛	01/24/23 13:40	01/25/23 07:58	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<b>0.68</b>	<b>F1 F2 B</b>	0.53	0.20	mg/Kg	⊛	01/23/23 12:58	01/23/23 14:34	1
pH (SW846 9045D)	<b>8.6</b>		0.2	0.2	SU			01/19/23 13:15	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B05-2 Dup**

**Lab Sample ID: 500-228083-11**

**Date Collected: 01/13/23 12:00**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**Percent Solids: 83.9**

**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	0.00059	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Acetone	<0.018		0.018	0.0076	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Chloroethane	<0.0044		0.0044	0.0013	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00051	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	✱	01/13/23 17:33	01/22/23 17:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	01/13/23 17:33	01/22/23 17:34	1
4-Bromofluorobenzene (Surr)	93		75 - 131	01/13/23 17:33	01/22/23 17:34	1
Dibromofluoromethane	83		75 - 126	01/13/23 17:33	01/22/23 17:34	1
Toluene-d8 (Surr)	91		75 - 124	01/13/23 17:33	01/22/23 17:34	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	✱	01/23/23 13:35	01/24/23 15:54	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	✱	01/23/23 13:35	01/24/23 15:54	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	✱	01/23/23 13:35	01/24/23 15:54	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	✱	01/23/23 13:35	01/24/23 15:54	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	✱	01/23/23 13:35	01/24/23 15:54	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B05-2 Dup**

**Lab Sample ID: 500-228083-11**

**Date Collected: 01/13/23 12:00**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**Percent Solids: 83.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	01/23/23 13:35	01/24/23 15:54	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B05-2 Dup**

**Lab Sample ID: 500-228083-11**

Date Collected: 01/13/23 12:00

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 83.9

**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	<0.039		0.039	0.010	mg/Kg	✱	01/23/23 13:35	01/24/23 15:54	1
Isophorone	<0.20		0.20	0.044	mg/Kg	✱	01/23/23 13:35	01/24/23 15:54	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	✱	01/23/23 13:35	01/24/23 15:54	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	✱	01/23/23 13:35	01/24/23 15:54	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	✱	01/23/23 13:35	01/24/23 15:54	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	✱	01/23/23 13:35	01/24/23 15:54	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	✱	01/23/23 13:35	01/24/23 15:54	1
<b>Phenanthrene</b>	<b>0.0072</b>	<b>J</b>	0.039	0.0055	mg/Kg	✱	01/23/23 13:35	01/24/23 15:54	1
Phenol	<0.20		0.20	0.087	mg/Kg	✱	01/23/23 13:35	01/24/23 15:54	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	✱	01/23/23 13:35	01/24/23 15:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	68		31 - 143	01/23/23 13:35	01/24/23 15:54	1
2-Fluorobiphenyl	65		43 - 145	01/23/23 13:35	01/24/23 15:54	1
2-Fluorophenol	81		31 - 166	01/23/23 13:35	01/24/23 15:54	1
Nitrobenzene-d5 (Surr)	57		37 - 147	01/23/23 13:35	01/24/23 15:54	1
Phenol-d5	77		30 - 153	01/23/23 13:35	01/24/23 15:54	1
Terphenyl-d14 (Surr)	88		42 - 157	01/23/23 13:35	01/24/23 15:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.68</b>	<b>J</b>	1.2	0.22	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
<b>Arsenic</b>	<b>10</b>		0.58	0.20	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
<b>Barium</b>	<b>62</b>		0.58	0.066	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
<b>Beryllium</b>	<b>0.98</b>		0.23	0.054	mg/Kg	✱	01/19/23 10:35	01/25/23 23:13	1
<b>Boron</b>	<b>11</b>		2.9	0.27	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
<b>Cadmium</b>	<b>0.16</b>	<b>B</b>	0.12	0.021	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
<b>Calcium</b>	<b>17000</b>	<b>B</b>	12	2.0	mg/Kg	✱	01/19/23 10:35	01/25/23 23:13	1
<b>Chromium</b>	<b>18</b>		0.58	0.29	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
<b>Cobalt</b>	<b>12</b>		0.29	0.076	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
<b>Copper</b>	<b>26</b>	<b>B</b>	0.58	0.16	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
<b>Iron</b>	<b>27000</b>		12	6.0	mg/Kg	✱	01/19/23 10:35	01/25/23 23:13	1
<b>Lead</b>	<b>21</b>		0.29	0.13	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
<b>Magnesium</b>	<b>15000</b>	<b>B</b>	5.8	2.9	mg/Kg	✱	01/19/23 10:35	01/25/23 23:13	1
<b>Manganese</b>	<b>160</b>		0.58	0.084	mg/Kg	✱	01/19/23 10:35	01/25/23 23:13	1
<b>Nickel</b>	<b>36</b>		0.58	0.17	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
<b>Potassium</b>	<b>2500</b>		29	10	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
Selenium	<0.58		0.58	0.34	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
<b>Silver</b>	<b>0.48</b>		0.29	0.075	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
<b>Sodium</b>	<b>180</b>		58	8.6	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
Thallium	<0.58		0.58	0.29	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
<b>Vanadium</b>	<b>25</b>		0.29	0.068	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	1
<b>Zinc</b>	<b>60</b>		1.2	0.51	mg/Kg	✱	01/19/23 10:35	01/25/23 00:10	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		01/26/23 17:58	01/27/23 20:03	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/26/23 17:58	01/27/23 20:03	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B05-2 Dup**

**Lab Sample ID: 500-228083-11**

Date Collected: 01/13/23 12:00

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		01/26/23 18:00	01/27/23 16:25	1
<b>Barium</b>	<b>0.10</b>	<b>J</b>	0.50	0.050	mg/L		01/26/23 18:00	01/27/23 16:25	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/26/23 18:00	01/27/23 16:25	1
<b>Boron</b>	<b>0.082</b>	<b>J</b>	0.10	0.050	mg/L		01/26/23 18:00	01/27/23 16:25	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/26/23 18:00	01/27/23 16:25	1
<b>Calcium</b>	<b>8.3</b>		2.5	0.50	mg/L		01/26/23 18:00	01/27/23 16:25	1
<b>Chromium</b>	<b>0.028</b>		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:25	1
Cobalt	<0.025		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:25	1
<b>Iron</b>	<b>23</b>		0.40	0.20	mg/L		01/26/23 18:00	01/27/23 16:25	1
<b>Lead</b>	<b>0.012</b>		0.0075	0.0075	mg/L		01/26/23 18:00	01/27/23 16:25	1
<b>Manganese</b>	<b>0.073</b>		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:25	1
<b>Nickel</b>	<b>0.025</b>		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:25	1
<b>Potassium</b>	<b>8.3</b>		2.5	0.50	mg/L		01/26/23 18:00	01/27/23 16:25	1
Selenium	<0.050		0.050	0.020	mg/L		01/26/23 18:00	01/27/23 16:25	1
Silver	<0.025		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:25	1
<b>Zinc</b>	<b>0.043</b>	<b>J</b>	0.50	0.020	mg/L		01/26/23 18:00	01/27/23 16:25	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		01/26/23 18:00	01/27/23 12:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/26/23 18:00	01/27/23 12:25	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		01/26/23 15:55	01/27/23 10:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.037</b>		0.019	0.0099	mg/Kg	⊛	01/24/23 13:40	01/25/23 08:00	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.28</b>	<b>J B</b>	0.60	0.23	mg/Kg	⊛	01/23/23 13:02	01/23/23 14:39	1
<b>pH (SW846 9045D)</b>	<b>8.0</b>		0.2	0.2	SU			01/19/23 20:32	1



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B06-1**

**Lab Sample ID: 500-228083-12**

Date Collected: 01/13/23 11:20

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00063	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00066	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
<b>Acetone</b>	<b>0.033</b>		0.019	0.0082	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Carbon disulfide	<0.0047		0.0047	0.00098	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00057	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Ethylbenzene	<0.0019		0.0019	0.00090	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Tetrachloroethene	<0.0019		0.0019	0.00064	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00066	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Vinyl chloride	<0.0019		0.0019	0.00083	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1
Xylenes, Total	<0.0038		0.0038	0.00060	mg/Kg	✱	01/13/23 17:33	01/22/23 18:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		70 - 134	01/13/23 17:33	01/22/23 18:00	1
4-Bromofluorobenzene (Surr)	96		75 - 131	01/13/23 17:33	01/22/23 18:00	1
Dibromofluoromethane	82		75 - 126	01/13/23 17:33	01/22/23 18:00	1
Toluene-d8 (Surr)	91		75 - 124	01/13/23 17:33	01/22/23 18:00	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	✱	01/23/23 13:35	01/24/23 16:15	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B06-1**

**Lab Sample ID: 500-228083-12**

Date Collected: 01/13/23 11:20

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
2,4-Dinitrophenol	<0.76		0.76	0.67	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Anthracene	<0.038		0.038	0.0063	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
<b>Benzo[a]anthracene</b>	<b>0.0060</b>	<b>J</b>	0.038	0.0051	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
<b>Benzo[a]pyrene</b>	<b>0.0074</b>	<b>J</b>	0.038	0.0073	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
<b>Benzo[b]fluoranthene</b>	<b>0.0082</b>	<b>J</b>	0.038	0.0082	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Carbazole	<0.19		0.19	0.095	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Chrysene	<0.038		0.038	0.010	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0073	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
<b>Fluoranthene</b>	<b>0.0080</b>	<b>J</b>	0.038	0.0070	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	✱	01/23/23 13:35	01/24/23 16:15	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B06-1**

**Lab Sample ID: 500-228083-12**

Date Collected: 01/13/23 11:20

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 84.5

## 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	<0.038		0.038	0.0098	mg/Kg	✳	01/23/23 13:35	01/24/23 16:15	1
Isophorone	<0.19		0.19	0.043	mg/Kg	✳	01/23/23 13:35	01/24/23 16:15	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	✳	01/23/23 13:35	01/24/23 16:15	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	✳	01/23/23 13:35	01/24/23 16:15	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	✳	01/23/23 13:35	01/24/23 16:15	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	✳	01/23/23 13:35	01/24/23 16:15	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	✳	01/23/23 13:35	01/24/23 16:15	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	✳	01/23/23 13:35	01/24/23 16:15	1
Phenol	<0.19		0.19	0.084	mg/Kg	✳	01/23/23 13:35	01/24/23 16:15	1
Pyrene	<0.038		0.038	0.0075	mg/Kg	✳	01/23/23 13:35	01/24/23 16:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	63		31 - 143	01/23/23 13:35	01/24/23 16:15	1
2-Fluorobiphenyl	60		43 - 145	01/23/23 13:35	01/24/23 16:15	1
2-Fluorophenol	78		31 - 166	01/23/23 13:35	01/24/23 16:15	1
Nitrobenzene-d5 (Surr)	52		37 - 147	01/23/23 13:35	01/24/23 16:15	1
Phenol-d5	65		30 - 153	01/23/23 13:35	01/24/23 16:15	1
Terphenyl-d14 (Surr)	83		42 - 157	01/23/23 13:35	01/24/23 16:15	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	✳	01/19/23 10:35	01/25/23 00:14	1
<b>Arsenic</b>	<b>12</b>		0.56	0.19	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	1
<b>Barium</b>	<b>73</b>		0.56	0.064	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	1
<b>Beryllium</b>	<b>1.0</b>		0.23	0.053	mg/Kg	✳	01/19/23 10:35	01/25/23 23:16	1
<b>Boron</b>	<b>11</b>		2.8	0.26	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	1
<b>Cadmium</b>	<b>0.28</b>	<b>B</b>	0.11	0.020	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	1
<b>Calcium</b>	<b>32000</b>	<b>B</b>	11	1.9	mg/Kg	✳	01/19/23 10:35	01/25/23 23:16	1
<b>Chromium</b>	<b>16</b>		0.56	0.28	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	1
<b>Cobalt</b>	<b>12</b>		0.28	0.074	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	1
<b>Copper</b>	<b>21</b>	<b>B</b>	0.56	0.16	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	1
<b>Iron</b>	<b>25000</b>		11	5.9	mg/Kg	✳	01/19/23 10:35	01/25/23 23:16	1
<b>Lead</b>	<b>19</b>		0.28	0.13	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	1
<b>Magnesium</b>	<b>19000</b>	<b>B</b>	5.6	2.8	mg/Kg	✳	01/19/23 10:35	01/25/23 23:16	1
<b>Manganese</b>	<b>330</b>		0.56	0.082	mg/Kg	✳	01/19/23 10:35	01/25/23 23:16	1
<b>Nickel</b>	<b>29</b>		0.56	0.16	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	1
<b>Potassium</b>	<b>2100</b>		28	10	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	1
Selenium	<0.56		0.56	0.33	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	1
<b>Silver</b>	<b>0.41</b>		0.28	0.073	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	1
<b>Sodium</b>	<b>130</b>		56	8.3	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	1
<b>Thallium</b>	<b>0.39</b>	<b>J</b>	0.56	0.28	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	1
<b>Vanadium</b>	<b>24</b>		0.28	0.066	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	1
<b>Zinc</b>	<b>70</b>		1.1	0.49	mg/Kg	✳	01/19/23 10:35	01/25/23 00:14	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		01/26/23 17:58	01/27/23 20:06	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/26/23 17:58	01/27/23 20:06	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B06-1**

**Lab Sample ID: 500-228083-12**

Date Collected: 01/13/23 11:20

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 84.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		01/26/23 18:00	01/27/23 16:28	1
<b>Barium</b>	<b>0.10</b>	<b>J</b>	0.50	0.050	mg/L		01/26/23 18:00	01/27/23 16:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/26/23 18:00	01/27/23 16:28	1
<b>Boron</b>	<b>0.11</b>		0.10	0.050	mg/L		01/26/23 18:00	01/27/23 16:28	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/26/23 18:00	01/27/23 16:28	1
<b>Calcium</b>	<b>11</b>		2.5	0.50	mg/L		01/26/23 18:00	01/27/23 16:28	1
<b>Chromium</b>	<b>0.033</b>		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:28	1
Cobalt	<0.025		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:28	1
<b>Iron</b>	<b>30</b>		0.40	0.20	mg/L		01/26/23 18:00	01/27/23 16:28	1
<b>Lead</b>	<b>0.018</b>		0.0075	0.0075	mg/L		01/26/23 18:00	01/27/23 16:28	1
<b>Manganese</b>	<b>0.088</b>		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:28	1
<b>Nickel</b>	<b>0.026</b>		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:28	1
<b>Potassium</b>	<b>8.0</b>		2.5	0.50	mg/L		01/26/23 18:00	01/27/23 16:28	1
Selenium	<0.050		0.050	0.020	mg/L		01/26/23 18:00	01/27/23 16:28	1
Silver	<0.025		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:28	1
<b>Zinc</b>	<b>0.079</b>	<b>J</b>	0.50	0.020	mg/L		01/26/23 18:00	01/27/23 16:28	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		01/26/23 18:00	01/27/23 12:27	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/26/23 18:00	01/27/23 12:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		01/26/23 15:55	01/27/23 10:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.062</b>		0.019	0.0099	mg/Kg	⊛	01/24/23 13:40	01/25/23 08:02	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.49</b>	<b>J B</b>	0.59	0.22	mg/Kg	⊛	01/23/23 13:03	01/23/23 14:41	1
<b>pH (SW846 9045D)</b>	<b>8.2</b>		0.2	0.2	SU			01/19/23 20:35	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B06-2**

**Lab Sample ID: 500-228083-13**

Date Collected: 01/13/23 11:30

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 80.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
2-Butanone (MEK)	<0.0042		0.0042	0.0018	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Acetone	<0.017		0.017	0.0072	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Carbon disulfide	<0.0042		0.0042	0.00086	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	✱	01/13/23 17:33	01/22/23 18:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		70 - 134	01/13/23 17:33	01/22/23 18:25	1
4-Bromofluorobenzene (Surr)	96		75 - 131	01/13/23 17:33	01/22/23 18:25	1
Dibromofluoromethane	86		75 - 126	01/13/23 17:33	01/22/23 18:25	1
Toluene-d8 (Surr)	89		75 - 124	01/13/23 17:33	01/22/23 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	0.043	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B06-2**

**Lab Sample ID: 500-228083-13**

**Date Collected: 01/13/23 11:30**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**Percent Solids: 80.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
2-Methylnaphthalene	<0.080		0.080	0.0073	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
2-Nitrophenol	<0.40		0.40	0.094	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Carbazole	<0.20		0.20	0.10	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Chrysene	<0.040		0.040	0.011	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	✱	01/23/23 13:35	01/24/23 16:37	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B06-2**

**Lab Sample ID: 500-228083-13**

Date Collected: 01/13/23 11:30

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 80.8

**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	<0.040		0.040	0.010	mg/Kg	✳	01/23/23 13:35	01/24/23 16:37	1
Isophorone	<0.20		0.20	0.045	mg/Kg	✳	01/23/23 13:35	01/24/23 16:37	1
Naphthalene	<0.040		0.040	0.0061	mg/Kg	✳	01/23/23 13:35	01/24/23 16:37	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	✳	01/23/23 13:35	01/24/23 16:37	1
N-Nitrosodi-n-propylamine	<0.080		0.080	0.049	mg/Kg	✳	01/23/23 13:35	01/24/23 16:37	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	✳	01/23/23 13:35	01/24/23 16:37	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	✳	01/23/23 13:35	01/24/23 16:37	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	✳	01/23/23 13:35	01/24/23 16:37	1
Phenol	<0.20		0.20	0.089	mg/Kg	✳	01/23/23 13:35	01/24/23 16:37	1
Pyrene	<0.040		0.040	0.0079	mg/Kg	✳	01/23/23 13:35	01/24/23 16:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	69		31 - 143				01/23/23 13:35	01/24/23 16:37	1
2-Fluorobiphenyl	77		43 - 145				01/23/23 13:35	01/24/23 16:37	1
2-Fluorophenol	88		31 - 166				01/23/23 13:35	01/24/23 16:37	1
Nitrobenzene-d5 (Surr)	65		37 - 147				01/23/23 13:35	01/24/23 16:37	1
Phenol-d5	75		30 - 153				01/23/23 13:35	01/24/23 16:37	1
Terphenyl-d14 (Surr)	96		42 - 157				01/23/23 13:35	01/24/23 16:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.46	J	1.2	0.22	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Arsenic	5.1		0.58	0.20	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Barium	48		0.58	0.066	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Beryllium	0.76		0.23	0.054	mg/Kg	✳	01/19/23 10:35	01/25/23 23:19	1
Boron	9.6		2.9	0.27	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Cadmium	0.16	B	0.12	0.021	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Calcium	50000		58	9.8	mg/Kg	✳	01/19/23 10:35	01/30/23 17:24	5
Chromium	13		0.58	0.29	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Cobalt	7.2		0.29	0.076	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Copper	24	B	0.58	0.16	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Iron	18000		12	6.0	mg/Kg	✳	01/19/23 10:35	01/25/23 23:19	1
Lead	15		0.29	0.13	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Magnesium	28000	B	5.8	2.9	mg/Kg	✳	01/19/23 10:35	01/25/23 23:19	1
Manganese	180		0.58	0.084	mg/Kg	✳	01/19/23 10:35	01/25/23 23:19	1
Nickel	21		0.58	0.17	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Potassium	1900		29	10	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Selenium	<0.58		0.58	0.34	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Silver	0.32		0.29	0.075	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Sodium	150		58	8.6	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Thallium	0.43	J	0.58	0.29	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Vanadium	17		0.29	0.068	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	1
Zinc	68		1.2	0.51	mg/Kg	✳	01/19/23 10:35	01/25/23 00:27	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		01/26/23 17:58	01/27/23 20:10	1
Iron	<0.40		0.40	0.20	mg/L		01/26/23 17:58	01/27/23 20:10	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/26/23 17:58	01/27/23 20:10	1
Manganese	0.17		0.025	0.010	mg/L		01/26/23 17:58	01/27/23 20:10	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

**Client Sample ID: 2852V-3-B06-2**

**Lab Sample ID: 500-228083-13**

Date Collected: 01/13/23 11:30

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 80.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.040	J	0.050	0.010	mg/L		01/26/23 18:00	01/27/23 16:31	1
Barium	0.26	J	0.50	0.050	mg/L		01/26/23 18:00	01/27/23 16:31	1
Beryllium	0.0042		0.0040	0.0040	mg/L		01/26/23 18:00	01/27/23 16:31	1
Boron	0.11		0.10	0.050	mg/L		01/26/23 18:00	01/27/23 16:31	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/26/23 18:00	01/27/23 16:31	1
Calcium	19		2.5	0.50	mg/L		01/26/23 18:00	01/27/23 16:31	1
Chromium	0.085		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:31	1
Cobalt	0.029		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:31	1
Iron	96		0.40	0.20	mg/L		01/26/23 18:00	01/27/23 16:31	1
Lead	0.073		0.0075	0.0075	mg/L		01/26/23 18:00	01/27/23 16:31	1
Manganese	0.26		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:31	1
Nickel	0.094		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:31	1
Potassium	17		2.5	0.50	mg/L		01/26/23 18:00	01/27/23 16:31	1
Selenium	<0.050		0.050	0.020	mg/L		01/26/23 18:00	01/27/23 16:31	1
Silver	<0.025		0.025	0.010	mg/L		01/26/23 18:00	01/27/23 16:31	1
Zinc	0.33	J	0.50	0.020	mg/L		01/26/23 18:00	01/27/23 16:31	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		01/26/23 17:58	01/27/23 13:30	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		01/26/23 18:00	01/27/23 12:29	1
Thallium	0.0034		0.0020	0.0020	mg/L		01/26/23 18:00	01/27/23 12:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		01/26/23 15:55	01/27/23 10:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.046		0.019	0.010	mg/Kg	☆	01/24/23 13:40	01/25/23 08:08	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.60		0.60	0.23	mg/Kg	☆	01/23/23 13:04	01/23/23 14:43	1
pH (SW846 9045D)	8.3		0.2	0.2	SU			01/19/23 20:37	1



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
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
B	Compound was found in the blank and sample.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

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

## Glossary

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

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228083-1

## Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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 - AE8-007

Job ID: 500-228083-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	12-31-23

# CHAIN OF CUSTODY RECORD



<b>Client Contact</b>	<b>Laboratory</b>	Project Name <u>AES-007A</u> 500-228083 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 <del>Teklab, Inc</del> <u>Euroflus</u> Address <del>5445 Horseshoe Lake Road</del> <del>Collinsville, IL 62234</del> Phone <del>877-344-1903</del> Contact <del>Shelly Hennessy</del> email <del>shennessy@teklabinc.com</del>	Project No <u>PTB/wc: 195-002/07A</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>500-228083</u> Sample Temp <u>34-725/9-750</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	ANALYSES												Comments	
					VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization		
1	2852V-3-B01-1	1/13	0900	S	X	X					X	X	X	X	X			
2	2852V-3-B01-2		0910	S	X	X					X	X	X	X	X			
3	2852V-3-B02-1		0920	S	X	X					X	X	X	X	X			
4	2852V-3-B02-2		0930	S	X	X					X	X	X	X	X			
5	2852V-3-B02-2 DUP		0940	S	X	X					X	X	X	X	X			
6	2852V-3-B03-1		1000	S	X	X					X	X	X	X	X			
7	2852V-3-B03-2		0950	S	X	X					X	X	X	X	X			
8	2852V-3-B04		1010	S	X	X					X	X	X	X	X			
9	2852V-3-B05-1		1140	S	X	X					X	X	X	X	X			
10	2852V-3-B05-2		1150	S	X	X					X	X	X	X	X			
11	2852V-3-B05-2 DUP		1200	S	X	X					X	X	X	X	X			
12	2852V-3-B06-1		1120	S	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

Relinquished by <u>Russ Chen</u>	Date/Time <u>1/13 1510</u>	Received by <u>J. Neal</u>	Date/Time <u>1/13/23 1510</u>
Relinquished by <u>J. Neal</u>	Date/Time <u>1/13/23 1615</u>	Received by <u>Stephanie Hummel/ECHA</u>	Date/Time <u>1/13/23 1615</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 <del>TekLab, Inc.</del> Eurofins Address <del>5445 Horseshoe Lake Road</del> Cottinsville, IL 62234 Phone <del>877-344-1003</del> Contact <b>Shelly Hannessy</b> email <del>shannessy@teklabinc.com</del>	Project Name <u>AES-007A</u> Project No <u>PTB/WO 195-002/07A</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>N. Coic / S. Khodari</u>	COC No <u>2</u> of <u>2</u> Lab Job No <u>500-228083</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																
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
13	2852V-3-1306-2	1/13	1130	S	X	X					X	X	X	X	X	
14	2852V-3-B07-1	↓	1020	S	X	X					X	X	X	X	X	
15	2852V-3-B07-2	↓	1030	S	X	X					X	X	X	X	X	
16	T.C.P Blank #7				X											

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

Relinquished by <u>[Signature]</u>	Date/Time <u>1/13 1510</u>	Received by <u>[Signature]</u>	Date/Time <u>1/13/23 1510</u>
Relinquished by <u>[Signature]</u>	Date/Time <u>1/13/23 1615</u>	Received by <u>Stephanne Hannessy EETA</u>	Date/Time <u>1/13/23 1615</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

<b>Client Information (Sub Contract Lab)</b>		Sampler:		Lab PM: Wright, Richard		Carrier Tracking No(s):		COC No: 500-169795.1			
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 #: 500-228083-1			
Address: 180 S. Van Buren Avenue,		Due Date Requested: 1/26/2023		<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 R - Na2S2O3 F - MeOH S - H2SO4 G - Amchlor T - TSP Dodecahydrate H - Ascorbic Acid U - Acetone I - Ice V - MCAA J - DI Water W - pH 4-5 K - EDTA Y - Trizma L - EDA Z - other (specify)	
City: Barberton		TAT Requested (days):									
State, Zip: OH, 44203		PO #:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers			
Phone: 330-497-9396(Tel) 330-497-0772(Fax)		WO #:									
Email:		Project #: 50021033		9012B/9012B - Prep Cyanide, Total							
Project Name: IDOT - AE8-007		SSOW#:									
Site:											
<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>Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)</b>	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	Special Instructions/Note: <b>E169</b>		
				Preservation Code:							
2852V-3-B01-1 (500-228083-1)		1/13/23	09:00 Central		Solid		X		1		
2852V-3-B01-2 (500-228083-2)		1/13/23	09:10 Central		Solid		X		1		
2852V-3-B02-1 (500-228083-3)		1/13/23	09:20 Central		Solid		X		1		
2852V-3-B02-2 (500-228083-4)		1/13/23	09:30 Central		Solid		X		1		
2852V-3-B02-2 Dup (500-228083-5)		1/13/23	09:40 Central		Solid		X		1		
2852V-3-B03-1 (500-228083-6)		1/13/23	10:00 Central		Solid		X		1		
2852V-3-B03-2 (500-228083-7)		1/13/23	09:50 Central		Solid		X		1		
2852V-3-B04 (500-228083-8)		1/13/23	10:10 Central		Solid		X		1		
2852V-3-B05-1 (500-228083-9)		1/13/23	11:40 Central		Solid		X		1		
<p>Note: Since laboratory accreditations are subject to change, Eurofins Chicago places the ownership of method, analyte &amp; 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.</p>											
<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>Nicole Z. W...</i>		Date/Time: 1/16/23 13:40		Company:		Received by: <i>[Signature]</i>		Date/Time: 1-17-23 0915			
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:			
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:			
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks:						

Page 125 of 128

1/31/2023





# 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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

620 East Avenue and 707 East 47th Street (northwest corner of 47th Street and East Avenue)

City: La Grange State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80575 Longitude: - 87.85962  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

Additional BOL: 0311535020

IEPA Site Number(s), if assigned: BOL: 0311535095 BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

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

Estimated Volume of debris (cu. Yd.): 618

### 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 2852V-7-B01 AND 2852V-7-B03 WERE SAMPLED ADJACENT TO SITE 2852V-7. SEE TABLE 3f AND FIGURES 4 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: 500-228189-1.

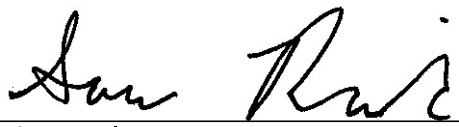
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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 5, 2023  
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 2852V-7  
Andrews Converting

Sample ID	2852V-7-B01-1	2852V-7-B01-2	2852V-7-B03-1	2852V-7-B03-2	Maximum Allowable Concentration					
Sample Depth (ft)	0-7.5	7.5-15	0-6	6-8	<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	1/16/2023	1/16/2023	1/16/2023	1/16/2023						
PID	0	0	0	0						
Sample pH	7.9	8.7	8.6	8.2						
Matrix	Soil	Soil	Soil	Soil						
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	0.43	1,2	J 0.0086	ND	ND	0.09	0.09	0.98	11.4	2.1



# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 1/31/2023 5:29:04 PM

## JOB DESCRIPTION

IDOT - AE8-007

## JOB NUMBER

500-228189-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
1/31/2023 5:29:04 PM

Authorized for release by  
Jodie Bracken, Project Management Assistant II  
[Jodie.Bracken@et.eurofinsus.com](mailto:Jodie.Bracken@et.eurofinsus.com)  
Designee for  
Richard Wright, Senior Project Manager  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)  
(708)746-0045

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B01-1**

**Lab Sample ID: 500-228189-1**

**Date Collected: 01/16/23 10:10**

**Matrix: Solid**

**Date Received: 01/17/23 11:25**

**Percent Solids: 76.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0024		0.0024	0.00079	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
1,1,2,2-Tetrachloroethane	<0.0024		0.0024	0.00075	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
1,1,2-Trichloroethane	<0.0024		0.0024	0.0010	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
1,1-Dichloroethane	<0.0024		0.0024	0.00081	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
1,1-Dichloroethene	<0.0024		0.0024	0.00081	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
1,2-Dichloroethane	<0.0059		0.0059	0.0018	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
1,2-Dichloropropane	<0.0024		0.0024	0.00061	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
1,3-Dichloropropene, Total	<0.0024		0.0024	0.00083	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
2-Butanone (MEK)	<0.0059		0.0059	0.0026	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
2-Hexanone	<0.0059		0.0059	0.0018	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
4-Methyl-2-pentanone (MIBK)	<0.0059		0.0059	0.0017	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Acetone	<0.024		0.024	0.010	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Benzene	<0.0024		0.0024	0.00060	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Bromodichloromethane	<0.0024		0.0024	0.00048	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Bromoform	<0.0024		0.0024	0.00069	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Bromomethane	<0.0059		0.0059	0.0022	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Carbon disulfide	<0.0059		0.0059	0.0012	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Carbon tetrachloride	<0.0024		0.0024	0.00069	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Chlorobenzene	<0.0024		0.0024	0.00087	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Chloroethane	<0.0059		0.0059	0.0017	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Chloroform	<0.0024		0.0024	0.00082	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Chloromethane	<0.0059	*	0.0059	0.0024	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
cis-1,2-Dichloroethene	<0.0024		0.0024	0.00066	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
cis-1,3-Dichloropropene	<0.0024	*	0.0024	0.00071	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Dibromochloromethane	<0.0024		0.0024	0.00077	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Ethylbenzene	<0.0024		0.0024	0.0011	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Methyl tert-butyl ether	<0.0024		0.0024	0.00069	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Methylene Chloride	<0.0059		0.0059	0.0023	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Styrene	<0.0024		0.0024	0.00071	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Tetrachloroethene	<0.0024		0.0024	0.00080	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Toluene	<0.0024		0.0024	0.00060	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
trans-1,2-Dichloroethene	<0.0024		0.0024	0.0010	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
trans-1,3-Dichloropropene	<0.0024	*	0.0024	0.00083	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Trichloroethene	<0.0024		0.0024	0.00080	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Vinyl chloride	<0.0024		0.0024	0.0010	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1
Xylenes, Total	<0.0047		0.0047	0.00076	mg/Kg	☆	01/17/23 16:47	01/23/23 15:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 134	01/17/23 16:47	01/23/23 15:59	1
4-Bromofluorobenzene (Surr)	91		75 - 131	01/17/23 16:47	01/23/23 15:59	1
Dibromofluoromethane	107		75 - 126	01/17/23 16:47	01/23/23 15:59	1
Toluene-d8 (Surr)	95		75 - 124	01/17/23 16:47	01/23/23 15:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.33		0.33	0.070	mg/Kg	☆	01/24/23 14:47	01/25/23 13:43	1
1,2-Dichlorobenzene	<0.33		0.33	0.078	mg/Kg	☆	01/24/23 14:47	01/25/23 13:43	1
1,3-Dichlorobenzene	<0.33		0.33	0.073	mg/Kg	☆	01/24/23 14:47	01/25/23 13:43	1
1,4-Dichlorobenzene	<0.33		0.33	0.083	mg/Kg	☆	01/24/23 14:47	01/25/23 13:43	1
2,2'-oxybis[1-chloropropane]	<0.33		0.33	0.075	mg/Kg	☆	01/24/23 14:47	01/25/23 13:43	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B01-1**

**Lab Sample ID: 500-228189-1**

**Date Collected: 01/16/23 10:10**

**Matrix: Solid**

**Date Received: 01/17/23 11:25**

**Percent Solids: 76.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.65		0.65	0.15	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
2,4,6-Trichlorophenol	<0.65		0.65	0.22	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
2,4-Dichlorophenol	<0.65		0.65	0.15	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
2,4-Dimethylphenol	<0.65		0.65	0.25	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
2,4-Dinitrophenol	<1.3		1.3	1.1	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
2,4-Dinitrotoluene	<0.33		0.33	0.10	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
2,6-Dinitrotoluene	<0.33		0.33	0.13	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
2-Chloronaphthalene	<0.33		0.33	0.072	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
2-Chlorophenol	<0.33		0.33	0.11	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
2-Methylnaphthalene	<0.13		0.13	0.012	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
2-Methylphenol	<0.33		0.33	0.10	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
2-Nitroaniline	<0.33		0.33	0.088	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
2-Nitrophenol	<0.65		0.65	0.15	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
3 & 4 Methylphenol	<0.33		0.33	0.11	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
3,3'-Dichlorobenzidine	<0.33		0.33	0.091	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
3-Nitroaniline	<0.65		0.65	0.20	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
4,6-Dinitro-2-methylphenol	<1.3		1.3	0.52	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
4-Bromophenyl phenyl ether	<0.33		0.33	0.086	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
4-Chloro-3-methylphenol	<0.65		0.65	0.22	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
4-Chloroaniline	<1.3		1.3	0.31	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
4-Chlorophenyl phenyl ether	<0.33		0.33	0.076	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
4-Nitroaniline	<0.65		0.65	0.27	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
4-Nitrophenol	<1.3		1.3	0.62	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Acenaphthene	<0.065		0.065	0.012	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
<b>Acenaphthylene</b>	<b>0.0092</b>	<b>J</b>	0.065	0.0086	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
<b>Anthracene</b>	<b>0.022</b>	<b>J</b>	0.065	0.011	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
<b>Benzo[a]anthracene</b>	<b>0.24</b>		0.065	0.0088	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
<b>Benzo[a]pyrene</b>	<b>0.43</b>		0.065	0.013	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
<b>Benzo[b]fluoranthene</b>	<b>0.52</b>		0.065	0.014	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
<b>Benzo[g,h,i]perylene</b>	<b>0.22</b>		0.065	0.021	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
<b>Benzo[k]fluoranthene</b>	<b>0.16</b>		0.065	0.019	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Bis(2-chloroethoxy)methane	<0.33		0.33	0.066	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Bis(2-chloroethyl)ether	<0.33		0.33	0.098	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Bis(2-ethylhexyl) phthalate	<0.33		0.33	0.12	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Butyl benzyl phthalate	<0.33		0.33	0.12	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Carbazole	<0.33		0.33	0.16	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
<b>Chrysene</b>	<b>0.28</b>		0.065	0.018	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
<b>Dibenz(a,h)anthracene</b>	<b>0.067</b>		0.065	0.013	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Dibenzofuran	<0.33		0.33	0.076	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Diethyl phthalate	<0.33		0.33	0.11	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Dimethyl phthalate	<0.33		0.33	0.085	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Di-n-butyl phthalate	<0.33		0.33	0.099	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Di-n-octyl phthalate	<0.33		0.33	0.11	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
<b>Fluoranthene</b>	<b>0.30</b>		0.065	0.012	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Fluorene	<0.065		0.065	0.0091	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Hexachlorobenzene	<0.13		0.13	0.015	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Hexachlorobutadiene	<0.33		0.33	0.10	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Hexachlorocyclopentadiene	<1.3		1.3	0.37	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1
Hexachloroethane	<0.33		0.33	0.099	mg/Kg	✱	01/24/23 14:47	01/25/23 13:43	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B01-1**

**Lab Sample ID: 500-228189-1**

Date Collected: 01/16/23 10:10

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 76.2

**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>0.23</b>	<b>*+</b>	0.065	0.017	mg/Kg	✳	01/24/23 14:47	01/25/23 13:43	1
Isophorone	<0.33		0.33	0.073	mg/Kg	✳	01/24/23 14:47	01/25/23 13:43	1
Naphthalene	<0.065		0.065	0.010	mg/Kg	✳	01/24/23 14:47	01/25/23 13:43	1
Nitrobenzene	<0.065		0.065	0.016	mg/Kg	✳	01/24/23 14:47	01/25/23 13:43	1
N-Nitrosodi-n-propylamine	<0.13		0.13	0.079	mg/Kg	✳	01/24/23 14:47	01/25/23 13:43	1
N-Nitrosodiphenylamine	<0.33		0.33	0.077	mg/Kg	✳	01/24/23 14:47	01/25/23 13:43	1
Pentachlorophenol	<1.3		1.3	1.0	mg/Kg	✳	01/24/23 14:47	01/25/23 13:43	1
<b>Phenanthrene</b>	<b>0.079</b>		0.065	0.0091	mg/Kg	✳	01/24/23 14:47	01/25/23 13:43	1
Phenol	<0.33		0.33	0.14	mg/Kg	✳	01/24/23 14:47	01/25/23 13:43	1
<b>Pyrene</b>	<b>0.27</b>		0.065	0.013	mg/Kg	✳	01/24/23 14:47	01/25/23 13:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	83		31 - 143				01/24/23 14:47	01/25/23 13:43	1
2-Fluorobiphenyl	70		43 - 145				01/24/23 14:47	01/25/23 13:43	1
2-Fluorophenol	86		31 - 166				01/24/23 14:47	01/25/23 13:43	1
Nitrobenzene-d5 (Surr)	56		37 - 147				01/24/23 14:47	01/25/23 13:43	1
Phenol-d5	77		30 - 153				01/24/23 14:47	01/25/23 13:43	1
Terphenyl-d14 (Surr)	103		42 - 157				01/24/23 14:47	01/25/23 13:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.43</b>	<b>J</b>	1.2	0.24	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Arsenic</b>	<b>7.3</b>		0.62	0.21	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Barium</b>	<b>78</b>		0.62	0.070	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Beryllium</b>	<b>0.92</b>		0.25	0.057	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Boron</b>	<b>11</b>		3.1	0.29	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Cadmium</b>	<b>0.21</b>		0.12	0.022	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Calcium</b>	<b>12000</b>		12	2.1	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Chromium</b>	<b>18</b>		0.62	0.30	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Cobalt</b>	<b>10</b>		0.31	0.081	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Copper</b>	<b>23</b>		0.62	0.17	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Iron</b>	<b>19000</b>		12	6.4	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Lead</b>	<b>22</b>		0.31	0.14	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Magnesium</b>	<b>8700</b>		6.2	3.1	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Manganese</b>	<b>270</b>		0.62	0.089	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Nickel</b>	<b>26</b>		0.62	0.18	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Potassium</b>	<b>1900</b>		31	11	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
Selenium	<0.62		0.62	0.36	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Silver</b>	<b>0.40</b>		0.31	0.079	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Sodium</b>	<b>440</b>		62	9.1	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Thallium</b>	<b>0.50</b>	<b>J</b>	0.62	0.31	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Vanadium</b>	<b>25</b>		0.31	0.073	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	1
<b>Zinc</b>	<b>66</b>		1.2	0.54	mg/Kg	✳	01/23/23 10:30	01/26/23 20:14	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		01/30/23 09:03	01/30/23 22:31	1
Iron	<0.40		0.40	0.20	mg/L		01/30/23 09:03	01/30/23 22:31	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/30/23 09:03	01/30/23 22:31	1
<b>Manganese</b>	<b>0.20</b>		0.025	0.010	mg/L		01/30/23 09:03	01/30/23 22:31	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B01-1**

**Lab Sample ID: 500-228189-1**

Date Collected: 01/16/23 10:10

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 76.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.022	J	0.050	0.010	mg/L		01/30/23 09:09	01/31/23 12:13	1
Barium	0.35	J	0.50	0.050	mg/L		01/30/23 09:09	01/31/23 12:13	1
Beryllium	0.0047		0.0040	0.0040	mg/L		01/30/23 09:09	01/31/23 12:13	1
Boron	0.097	J	0.10	0.050	mg/L		01/30/23 09:09	01/31/23 12:13	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/30/23 09:09	01/31/23 12:13	1
Calcium	17		2.5	0.50	mg/L		01/30/23 09:09	01/31/23 12:13	1
Chromium	0.088		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:13	1
Cobalt	0.019	J	0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:13	1
Iron	77		0.40	0.20	mg/L		01/30/23 09:09	01/31/23 12:13	1
Lead	0.055		0.0075	0.0075	mg/L		01/30/23 09:09	01/31/23 12:13	1
Manganese	0.28		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:13	1
Nickel	0.073		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:13	1
Potassium	14		2.5	0.50	mg/L		01/30/23 09:09	01/31/23 12:13	1
Selenium	<0.050		0.050	0.020	mg/L		01/30/23 09:09	01/31/23 12:13	1
Silver	<0.025		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:13	1
Zinc	0.22	J	0.50	0.020	mg/L		01/30/23 09:09	01/31/23 12:13	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		01/30/23 09:03	01/31/23 11:50	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		01/30/23 09:09	01/30/23 17:49	1
Thallium	0.0037		0.0020	0.0020	mg/L		01/30/23 09:09	01/30/23 17:49	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		01/30/23 10:50	01/31/23 09:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040		0.021	0.011	mg/Kg	✱	01/26/23 14:20	01/27/23 08:55	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.91	B	0.68	0.26	mg/Kg	✱	01/23/23 15:51	01/23/23 16:52	1
pH (SW846 9045D)	7.9		0.2	0.2	SU			01/19/23 21:58	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B01-2**

**Lab Sample ID: 500-228189-2**

**Date Collected: 01/16/23 10:20**

**Matrix: Solid**

**Date Received: 01/17/23 11:25**

**Percent Solids: 89.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
1,1-Dichloroethane	<0.0015		0.0015	0.00053	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
1,2-Dichloroethane	<0.0039		0.0039	0.0012	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
2-Butanone (MEK)	<0.0039		0.0039	0.0017	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
2-Hexanone	<0.0039		0.0039	0.0012	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
4-Methyl-2-pentanone (MIBK)	<0.0039		0.0039	0.0011	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Acetone	<0.015		0.015	0.0067	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Bromomethane	<0.0039		0.0039	0.0015	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Carbon disulfide	<0.0039		0.0039	0.00080	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Carbon tetrachloride	<0.0015		0.0015	0.00045	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Chlorobenzene	<0.0015		0.0015	0.00057	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Chloroethane	<0.0039		0.0039	0.0011	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Chloroform	<0.0015		0.0015	0.00054	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Chloromethane	<0.0039	*	0.0039	0.0016	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
cis-1,3-Dichloropropene	<0.0015	*	0.0015	0.00047	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Ethylbenzene	<0.0015		0.0015	0.00074	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Methylene Chloride	<0.0039		0.0039	0.0015	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Styrene	<0.0015		0.0015	0.00047	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Tetrachloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
trans-1,3-Dichloropropene	<0.0015	*	0.0015	0.00054	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	01/17/23 16:47	01/23/23 16:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 134	01/17/23 16:47	01/23/23 16:23	1
4-Bromofluorobenzene (Surr)	91		75 - 131	01/17/23 16:47	01/23/23 16:23	1
Dibromofluoromethane	112		75 - 126	01/17/23 16:47	01/23/23 16:23	1
Toluene-d8 (Surr)	90		75 - 124	01/17/23 16:47	01/23/23 16:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	01/24/23 14:47	01/25/23 14:05	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	01/24/23 14:47	01/25/23 14:05	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	01/24/23 14:47	01/25/23 14:05	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	01/24/23 14:47	01/25/23 14:05	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	01/24/23 14:47	01/25/23 14:05	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B01-2**

**Lab Sample ID: 500-228189-2**

**Date Collected: 01/16/23 10:20**

**Matrix: Solid**

**Date Received: 01/17/23 11:25**

**Percent Solids: 89.0**

**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	✱	01/24/23 14:47	01/25/23 14:05	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
<b>Acenaphthylene</b>	<b>0.0063</b>	<b>J</b>	0.036	0.0048	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
<b>Benzo[a]anthracene</b>	<b>0.0053</b>	<b>J</b>	0.036	0.0049	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
<b>Benzo[a]pyrene</b>	<b>0.0086</b>	<b>J</b>	0.036	0.0071	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
<b>Benzo[b]fluoranthene</b>	<b>0.012</b>	<b>J</b>	0.036	0.0079	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Carbazole	<0.18		0.18	0.091	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Chrysene	<0.036		0.036	0.010	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Fluoranthene	<0.036		0.036	0.0068	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	✱	01/24/23 14:47	01/25/23 14:05	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B01-2**

**Lab Sample ID: 500-228189-2**

Date Collected: 01/16/23 10:20

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 89.0

**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	<0.036	*+	0.036	0.0095	mg/Kg	✳	01/24/23 14:47	01/25/23 14:05	1
Isophorone	<0.18		0.18	0.041	mg/Kg	✳	01/24/23 14:47	01/25/23 14:05	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	✳	01/24/23 14:47	01/25/23 14:05	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	✳	01/24/23 14:47	01/25/23 14:05	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	✳	01/24/23 14:47	01/25/23 14:05	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	✳	01/24/23 14:47	01/25/23 14:05	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	✳	01/24/23 14:47	01/25/23 14:05	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	✳	01/24/23 14:47	01/25/23 14:05	1
Phenol	<0.18		0.18	0.081	mg/Kg	✳	01/24/23 14:47	01/25/23 14:05	1
Pyrene	<0.036		0.036	0.0073	mg/Kg	✳	01/24/23 14:47	01/25/23 14:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	74		31 - 143	01/24/23 14:47	01/25/23 14:05	1
2-Fluorobiphenyl	70		43 - 145	01/24/23 14:47	01/25/23 14:05	1
2-Fluorophenol	94		31 - 166	01/24/23 14:47	01/25/23 14:05	1
Nitrobenzene-d5 (Surr)	58		37 - 147	01/24/23 14:47	01/25/23 14:05	1
Phenol-d5	85		30 - 153	01/24/23 14:47	01/25/23 14:05	1
Terphenyl-d14 (Surr)	93		42 - 157	01/24/23 14:47	01/25/23 14:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.46	J	1.1	0.21	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Arsenic	6.7		0.54	0.18	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Barium	28		2.7	0.31	mg/Kg	✳	01/23/23 10:30	01/28/23 00:20	5
Beryllium	0.42		0.21	0.050	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Boron	9.0		2.7	0.25	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Cadmium	0.19		0.11	0.019	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Calcium	12000		54	9.1	mg/Kg	✳	01/23/23 10:30	01/28/23 00:20	5
Chromium	7.1		0.54	0.27	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Cobalt	7.4		0.27	0.070	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Copper	17		0.54	0.15	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Iron	17000		54	28	mg/Kg	✳	01/23/23 10:30	01/28/23 00:20	5
Lead	10		0.27	0.12	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Magnesium	72000		27	13	mg/Kg	✳	01/23/23 10:30	01/28/23 00:20	5
Manganese	270		0.54	0.078	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Nickel	17		0.54	0.16	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Potassium	1300		27	9.5	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Selenium	<0.54		0.54	0.32	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Silver	0.14	J	0.27	0.069	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Sodium	180		54	7.9	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Thallium	0.45	J	0.54	0.27	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Vanadium	11		0.27	0.063	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	1
Zinc	38		1.1	0.47	mg/Kg	✳	01/23/23 10:30	01/26/23 20:17	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		01/30/23 09:03	01/30/23 23:24	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/30/23 09:03	01/30/23 23:24	1
Iron	<0.40		0.40	0.20	mg/L		01/30/23 09:03	01/30/23 23:24	1
Lead	0.011		0.0075	0.0075	mg/L		01/30/23 09:03	01/30/23 23:24	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B01-2**

**Lab Sample ID: 500-228189-2**

Date Collected: 01/16/23 10:20

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	2.2	B	0.025	0.010	mg/L		01/30/23 09:03	01/30/23 23:24	1
Nickel	0.019	J	0.025	0.010	mg/L		01/30/23 09:03	01/30/23 23:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.064		0.050	0.010	mg/L		01/30/23 09:09	01/31/23 12:16	1
Barium	0.26	J	0.50	0.050	mg/L		01/30/23 09:09	01/31/23 12:16	1
Beryllium	0.0055		0.0040	0.0040	mg/L		01/30/23 09:09	01/31/23 12:16	1
Boron	0.12		0.10	0.050	mg/L		01/30/23 09:09	01/31/23 12:16	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/30/23 09:09	01/31/23 12:16	1
Calcium	24		2.5	0.50	mg/L		01/30/23 09:09	01/31/23 12:16	1
Chromium	0.084		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:16	1
Cobalt	0.037		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:16	1
Iron	130		0.40	0.20	mg/L		01/30/23 09:09	01/31/23 12:16	1
Lead	0.075		0.0075	0.0075	mg/L		01/30/23 09:09	01/31/23 12:16	1
Manganese	0.46		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:16	1
Nickel	0.12		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:16	1
Potassium	21		2.5	0.50	mg/L		01/30/23 09:09	01/31/23 12:16	1
Selenium	<0.050		0.050	0.020	mg/L		01/30/23 09:09	01/31/23 12:16	1
Silver	<0.025		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:16	1
Zinc	0.31	J	0.50	0.020	mg/L		01/30/23 09:09	01/31/23 12:16	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		01/30/23 09:03	01/31/23 12:14	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		01/30/23 09:09	01/30/23 17:51	1
Thallium	0.0047		0.0020	0.0020	mg/L		01/30/23 09:09	01/30/23 17:51	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		01/30/23 10:50	01/31/23 09:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.018	0.0094	mg/Kg	☆	01/26/23 14:20	01/27/23 08:57	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	2.0	B	0.59	0.22	mg/Kg	☆	01/23/23 15:53	01/23/23 16:53	1
pH (SW846 9045D)	8.7		0.2	0.2	SU			01/19/23 22:01	1



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B03-1**

**Lab Sample ID: 500-228189-5**

Date Collected: 01/16/23 09:30

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 84.6

**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	0.00055	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Chloromethane	<0.0041	*	0.0041	0.0016	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
cis-1,3-Dichloropropene	<0.0016	*	0.0016	0.00049	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
trans-1,3-Dichloropropene	<0.0016	*	0.0016	0.00057	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	01/17/23 16:47	01/23/23 17:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		70 - 134	01/17/23 16:47	01/23/23 17:37	1
4-Bromofluorobenzene (Surr)	92		75 - 131	01/17/23 16:47	01/23/23 17:37	1
Dibromofluoromethane	109		75 - 126	01/17/23 16:47	01/23/23 17:37	1
Toluene-d8 (Surr)	91		75 - 124	01/17/23 16:47	01/23/23 17:37	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	☼	01/24/23 14:47	01/25/23 14:47	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B03-1**

**Lab Sample ID: 500-228189-5**

**Date Collected: 01/16/23 09:30**

**Matrix: Solid**

**Date Received: 01/17/23 11:25**

**Percent Solids: 84.6**

**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	☼	01/24/23 14:47	01/25/23 14:47	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B03-1**

**Lab Sample ID: 500-228189-5**

Date Collected: 01/16/23 09:30

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 84.6

**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	☼	01/24/23 14:47	01/25/23 14:47	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	01/24/23 14:47	01/25/23 14:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	52		31 - 143				01/24/23 14:47	01/25/23 14:47	1
2-Fluorobiphenyl	44		43 - 145				01/24/23 14:47	01/25/23 14:47	1
2-Fluorophenol	52		31 - 166				01/24/23 14:47	01/25/23 14:47	1
Nitrobenzene-d5 (Surr)	37		37 - 147				01/24/23 14:47	01/25/23 14:47	1
Phenol-d5	49		30 - 153				01/24/23 14:47	01/25/23 14:47	1
Terphenyl-d14 (Surr)	65		42 - 157				01/24/23 14:47	01/25/23 14:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.49	J	1.2	0.23	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Arsenic	11		0.59	0.20	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Barium	29		0.59	0.067	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Beryllium	0.76		0.23	0.055	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Boron	11		2.9	0.27	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Cadmium	0.23		0.12	0.021	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Calcium	44000		23	4.0	mg/Kg	☼	01/23/23 10:30	01/28/23 00:26	2
Chromium	14		0.59	0.29	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Cobalt	16		0.29	0.077	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Copper	25		0.59	0.16	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Iron	20000		12	6.1	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Lead	15		0.29	0.14	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Magnesium	25000		5.9	2.9	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Manganese	440		0.59	0.085	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Nickel	33		0.59	0.17	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Potassium	2200		29	10	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Selenium	<0.59		0.59	0.34	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Silver	0.29		0.29	0.075	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Sodium	1100		59	8.7	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Thallium	0.46	J	0.59	0.29	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Vanadium	17		0.29	0.069	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	1
Zinc	65		1.2	0.51	mg/Kg	☼	01/23/23 10:30	01/26/23 20:27	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		01/30/23 09:03	01/30/23 22:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/30/23 09:03	01/30/23 22:41	1
Chromium	<0.025		0.025	0.010	mg/L		01/30/23 09:03	01/30/23 22:41	1
Iron	<0.40		0.40	0.20	mg/L		01/30/23 09:03	01/30/23 22:41	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B03-1**

**Lab Sample ID: 500-228189-5**

Date Collected: 01/16/23 09:30

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 84.6

**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		01/30/23 09:03	01/30/23 22:41	1
<b>Manganese</b>	<b>3.6</b>		0.025	0.010	mg/L		01/30/23 09:03	01/30/23 22:41	1
<b>Nickel</b>	<b>0.013</b>	<b>J</b>	0.025	0.010	mg/L		01/30/23 09:03	01/30/23 22:41	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		01/30/23 09:09	01/31/23 12:25	1
<b>Barium</b>	<b>0.36</b>	<b>J</b>	0.50	0.050	mg/L		01/30/23 09:09	01/31/23 12:25	1
<b>Beryllium</b>	<b>0.0096</b>		0.0040	0.0040	mg/L		01/30/23 09:09	01/31/23 12:25	1
<b>Boron</b>	<b>0.19</b>		0.10	0.050	mg/L		01/30/23 09:09	01/31/23 12:25	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/30/23 09:09	01/31/23 12:25	1
<b>Calcium</b>	<b>20</b>		2.5	0.50	mg/L		01/30/23 09:09	01/31/23 12:25	1
<b>Chromium</b>	<b>0.16</b>		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:25	1
<b>Cobalt</b>	<b>0.093</b>		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:25	1
<b>Iron</b>	<b>200</b>		0.40	0.20	mg/L		01/30/23 09:09	01/31/23 12:25	1
<b>Lead</b>	<b>0.14</b>		0.0075	0.0075	mg/L		01/30/23 09:09	01/31/23 12:25	1
<b>Manganese</b>	<b>1.3</b>		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:25	1
<b>Nickel</b>	<b>0.25</b>		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:25	1
<b>Potassium</b>	<b>36</b>		2.5	0.50	mg/L		01/30/23 09:09	01/31/23 12:25	1
Selenium	<0.050		0.050	0.020	mg/L		01/30/23 09:09	01/31/23 12:25	1
Silver	<0.025		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:25	1
<b>Zinc</b>	<b>0.52</b>		0.50	0.020	mg/L		01/30/23 09:09	01/31/23 12:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		01/30/23 09:03	01/31/23 11:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/30/23 09:03	01/31/23 11:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.0079</b>		0.0060	0.0060	mg/L		01/30/23 09:09	01/30/23 17:57	1
<b>Thallium</b>	<b>0.0083</b>		0.0020	0.0020	mg/L		01/30/23 09:09	01/30/23 17:57	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		01/30/23 10:50	01/31/23 09:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.024</b>		0.019	0.010	mg/Kg	☼	01/26/23 14:20	01/27/23 09:13	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>1.7</b>	<b>B</b>	0.59	0.22	mg/Kg	☼	01/23/23 15:56	01/23/23 17:12	1
<b>pH (SW846 9045D)</b>	<b>8.6</b>		0.2	0.2	SU			01/19/23 22:06	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B03-2**

**Lab Sample ID: 500-228189-6**

**Date Collected: 01/16/23 09:40**

**Matrix: Solid**

**Date Received: 01/17/23 11:25**

**Percent Solids: 81.0**

**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	✳	01/17/23 16:47	01/23/23 18:01	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00081	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
1,1-Dichloroethane	<0.0019		0.0019	0.00065	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
1,1-Dichloroethene	<0.0019		0.0019	0.00065	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
1,2-Dichloropropane	<0.0019		0.0019	0.00049	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Acetone	<0.019		0.019	0.0083	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Bromoform	<0.0019		0.0019	0.00055	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Carbon disulfide	<0.0047		0.0047	0.00099	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Carbon tetrachloride	<0.0019		0.0019	0.00055	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Chlorobenzene	<0.0019		0.0019	0.00070	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Chloroethane	<0.0047		0.0047	0.0014	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Chloromethane	<0.0047	*	0.0047	0.0019	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00053	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
cis-1,3-Dichloropropene	<0.0019	*	0.0019	0.00057	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Dibromochloromethane	<0.0019		0.0019	0.00062	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Ethylbenzene	<0.0019		0.0019	0.00091	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Methylene Chloride	<0.0047		0.0047	0.0019	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Styrene	<0.0019		0.0019	0.00057	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00084	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
trans-1,3-Dichloropropene	<0.0019	*	0.0019	0.00067	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Trichloroethene	<0.0019		0.0019	0.00064	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Vinyl chloride	<0.0019		0.0019	0.00084	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	✳	01/17/23 16:47	01/23/23 18:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		70 - 134	01/17/23 16:47	01/23/23 18:01	1
4-Bromofluorobenzene (Surr)	90		75 - 131	01/17/23 16:47	01/23/23 18:01	1
Dibromofluoromethane	108		75 - 126	01/17/23 16:47	01/23/23 18:01	1
Toluene-d8 (Surr)	85		75 - 124	01/17/23 16:47	01/23/23 18:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.31		0.31	0.065	mg/Kg	✳	01/24/23 14:47	01/25/23 15:09	1
1,2-Dichlorobenzene	<0.31		0.31	0.073	mg/Kg	✳	01/24/23 14:47	01/25/23 15:09	1
1,3-Dichlorobenzene	<0.31		0.31	0.068	mg/Kg	✳	01/24/23 14:47	01/25/23 15:09	1
1,4-Dichlorobenzene	<0.31		0.31	0.078	mg/Kg	✳	01/24/23 14:47	01/25/23 15:09	1
2,2'-oxybis[1-chloropropane]	<0.31		0.31	0.070	mg/Kg	✳	01/24/23 14:47	01/25/23 15:09	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B03-2**

**Lab Sample ID: 500-228189-6**

**Date Collected: 01/16/23 09:40**

**Matrix: Solid**

**Date Received: 01/17/23 11:25**

**Percent Solids: 81.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.60		0.60	0.14	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
2,4,6-Trichlorophenol	<0.60		0.60	0.21	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
2,4-Dichlorophenol	<0.60		0.60	0.14	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
2,4-Dimethylphenol	<0.60		0.60	0.23	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
2,4-Dinitrophenol	<1.2		1.2	1.1	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
2,4-Dinitrotoluene	<0.31		0.31	0.096	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
2,6-Dinitrotoluene	<0.31		0.31	0.12	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
2-Chloronaphthalene	<0.31		0.31	0.067	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
2-Chlorophenol	<0.31		0.31	0.10	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
2-Methylnaphthalene	<0.12		0.12	0.011	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
2-Methylphenol	<0.31		0.31	0.097	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
2-Nitroaniline	<0.31		0.31	0.082	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
2-Nitrophenol	<0.60		0.60	0.14	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
3 & 4 Methylphenol	<0.31		0.31	0.10	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
3,3'-Dichlorobenzidine	<0.31		0.31	0.085	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
3-Nitroaniline	<0.60		0.60	0.19	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
4,6-Dinitro-2-methylphenol	<1.2		1.2	0.49	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
4-Bromophenyl phenyl ether	<0.31		0.31	0.080	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
4-Chloro-3-methylphenol	<0.60		0.60	0.21	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
4-Chloroaniline	<1.2		1.2	0.29	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
4-Chlorophenyl phenyl ether	<0.31		0.31	0.071	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
4-Nitroaniline	<0.60		0.60	0.25	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
4-Nitrophenol	<1.2		1.2	0.58	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Acenaphthene	<0.060		0.060	0.011	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Acenaphthylene	<0.060		0.060	0.0080	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
<b>Anthracene</b>	<b>0.013 J</b>		0.060	0.010	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Benzo[a]anthracene	<0.060		0.060	0.0082	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Benzo[a]pyrene	<0.060		0.060	0.012	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Benzo[b]fluoranthene	<0.060		0.060	0.013	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Benzo[g,h,i]perylene	<0.060		0.060	0.020	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Benzo[k]fluoranthene	<0.060		0.060	0.018	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Bis(2-chloroethoxy)methane	<0.31		0.31	0.062	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Bis(2-chloroethyl)ether	<0.31		0.31	0.091	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Bis(2-ethylhexyl) phthalate	<0.31		0.31	0.11	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Butyl benzyl phthalate	<0.31		0.31	0.12	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Carbazole	<0.31		0.31	0.15	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Chrysene	<0.060		0.060	0.017	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Dibenz(a,h)anthracene	<0.060		0.060	0.012	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Dibenzofuran	<0.31		0.31	0.071	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Diethyl phthalate	<0.31		0.31	0.10	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Dimethyl phthalate	<0.31		0.31	0.079	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Di-n-butyl phthalate	<0.31		0.31	0.092	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Di-n-octyl phthalate	<0.31		0.31	0.099	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Fluoranthene	<0.060		0.060	0.011	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Fluorene	<0.060		0.060	0.0085	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Hexachlorobenzene	<0.12		0.12	0.014	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Hexachlorobutadiene	<0.31		0.31	0.095	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Hexachlorocyclopentadiene	<1.2		1.2	0.35	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1
Hexachloroethane	<0.31		0.31	0.092	mg/Kg	✱	01/24/23 14:47	01/25/23 15:09	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B03-2**

**Lab Sample ID: 500-228189-6**

Date Collected: 01/16/23 09:40

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 81.0

**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	<0.060	*+	0.060	0.016	mg/Kg	✳	01/24/23 14:47	01/25/23 15:09	1
Isophorone	<0.31		0.31	0.068	mg/Kg	✳	01/24/23 14:47	01/25/23 15:09	1
Naphthalene	<0.060		0.060	0.0093	mg/Kg	✳	01/24/23 14:47	01/25/23 15:09	1
Nitrobenzene	<0.060		0.060	0.015	mg/Kg	✳	01/24/23 14:47	01/25/23 15:09	1
N-Nitrosodi-n-propylamine	<0.12		0.12	0.074	mg/Kg	✳	01/24/23 14:47	01/25/23 15:09	1
N-Nitrosodiphenylamine	<0.31		0.31	0.072	mg/Kg	✳	01/24/23 14:47	01/25/23 15:09	1
Pentachlorophenol	<1.2		1.2	0.97	mg/Kg	✳	01/24/23 14:47	01/25/23 15:09	1
Phenanthrene	<0.060		0.060	0.0085	mg/Kg	✳	01/24/23 14:47	01/25/23 15:09	1
Phenol	<0.31		0.31	0.13	mg/Kg	✳	01/24/23 14:47	01/25/23 15:09	1
Pyrene	<0.060		0.060	0.012	mg/Kg	✳	01/24/23 14:47	01/25/23 15:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	64		31 - 143	01/24/23 14:47	01/25/23 15:09	1
2-Fluorobiphenyl	52		43 - 145	01/24/23 14:47	01/25/23 15:09	1
2-Fluorophenol	69		31 - 166	01/24/23 14:47	01/25/23 15:09	1
Nitrobenzene-d5 (Surr)	42		37 - 147	01/24/23 14:47	01/25/23 15:09	1
Phenol-d5	59		30 - 153	01/24/23 14:47	01/25/23 15:09	1
Terphenyl-d14 (Surr)	86		42 - 157	01/24/23 14:47	01/25/23 15:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.74	J	1.2	0.23	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Arsenic	9.5		0.60	0.20	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Barium	27		0.60	0.068	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Beryllium	0.63		0.24	0.056	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Boron	7.7		3.0	0.28	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Cadmium	0.28		0.12	0.021	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Calcium	36000		12	2.0	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Chromium	12		0.60	0.30	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Cobalt	7.8		0.30	0.078	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Copper	30		0.60	0.17	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Iron	18000		12	6.2	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Lead	20		0.30	0.14	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Magnesium	25000		6.0	3.0	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Manganese	180		0.60	0.086	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Nickel	23		0.60	0.17	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Potassium	1500		30	11	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Selenium	<0.60		0.60	0.35	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Silver	0.32		0.30	0.077	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Sodium	290		60	8.8	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Thallium	0.71		0.60	0.30	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Vanadium	16		0.30	0.070	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1
Zinc	94		1.2	0.52	mg/Kg	✳	01/23/23 10:30	01/26/23 20:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		01/30/23 09:09	01/31/23 12:28	1
Barium	<0.50		0.50	0.050	mg/L		01/30/23 09:09	01/31/23 12:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/30/23 09:09	01/31/23 12:28	1
Boron	<0.10		0.10	0.050	mg/L		01/30/23 09:09	01/31/23 12:28	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

**Client Sample ID: 2852V-7-B03-2**

**Lab Sample ID: 500-228189-6**

Date Collected: 01/16/23 09:40

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 81.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/30/23 09:09	01/31/23 12:28	1
<b>Calcium</b>	<b>14</b>		2.5	0.50	mg/L		01/30/23 09:09	01/31/23 12:28	1
Chromium	<0.025		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:28	1
Cobalt	<0.025		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:28	1
<b>Iron</b>	<b>1.2</b>		0.40	0.20	mg/L		01/30/23 09:09	01/31/23 12:28	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/30/23 09:09	01/31/23 12:28	1
<b>Manganese</b>	<b>0.011</b>	<b>J</b>	0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:28	1
Nickel	<0.025		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:28	1
<b>Potassium</b>	<b>0.86</b>	<b>J</b>	2.5	0.50	mg/L		01/30/23 09:09	01/31/23 12:28	1
Selenium	<0.050		0.050	0.020	mg/L		01/30/23 09:09	01/31/23 12:28	1
Silver	<0.025		0.025	0.010	mg/L		01/30/23 09:09	01/31/23 12:28	1
Zinc	<0.50		0.50	0.020	mg/L		01/30/23 09:09	01/31/23 12:28	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		01/30/23 09:09	01/30/23 18:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/30/23 09:09	01/30/23 18:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		01/30/23 10:50	01/31/23 09:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.027</b>		0.019	0.010	mg/Kg	⊛	01/26/23 14:20	01/27/23 09:15	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>1.1</b>	<b>B</b>	0.62	0.23	mg/Kg	⊛	01/23/23 15:57	01/23/23 17:14	1
<b>pH (SW846 9045D)</b>	<b>8.2</b>		0.2	0.2	SU			01/19/23 22:11	1



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.

### 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.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
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.

## Glossary

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

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228189-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	12-31-23

**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 <del>TekLab, Inc.</del> <u>EuroAios</u> Address <u>5445 Horseshoe Lake Road</u> <u>Collinsville, IL 62234</u> Phone <del>877-344-1003</del> Contact <u>Shelly Hennessy</u> email <u>shennessy@toklabinc.com</u>	Project Name <u>AES-007A</u> 500-228189 COC Project No <u>PTB/WO' 195-002/07A</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:	COC No <u>1</u> of <u>1</u> Lab Job No <u>500-228189</u> Sample Temp <u>2.2-1.1</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																				
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				
1	2852V-7-B01-1	116	1010	S	X	X					X	X	X	X	X					
2	2852V-7-B01-2	↓	1020	S	X	X					X	X	X	X	X					
3	2852V-7-B02-1		0950	S	X	X						X	X	X	X	X				
4	2852V-7-B02-2		1000	S	X	X						X	X	X	X	X				
5	2852V-7-B03-1		0930	S	X	X						X	X	X	X	X				
6	2852V-7-B03-2		0940	S	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	2852V-7-B01-1	116	1010	S	X	X					X	X	X	X	X					
2	2852V-7-B01-2	↓	1020	S	X	X					X	X	X	X	X					
3	2852V-7-B02-1		0950	S	X	X						X	X	X	X	X				
4	2852V-7-B02-2		1000	S	X	X						X	X	X	X	X				
5	2852V-7-B03-1		0930	S	X	X						X	X	X	X	X				
6	2852V-7-B03-2		0940	S	X	X						X	X	X	X	X				

Relinquished by <u>A. Kuhl</u>	Date/Time <u>1/17/23 0923</u>	Received by <u>P. Neal</u>	Date/Time <u>1/17/23 0923</u>
Relinquished by <u>P. Neal</u>	Date/Time <u>1/17/23 1125</u>	Received by <u>Stephanie Hennessy EETA</u>	Date/Time <u>1/17/23 1125</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**



<b>Client Information (Sub Contract Lab)</b>			Sampler:		Lab PM: Wright, Richard		Carrier Tracking No(s):		COC No: 500-169864.1																																							
Client Contact: Shipping/Receiving			Phone:		E-Mail: Richard.Wright@et.eurofinsus.com		State of Origin: Illinois		Page: Page 1 of 1																																							
Company: Eurofins Environment Testing North Centr			Accreditations Required (See note): NELAP - Illinois		Job #: 500-228189-1																																											
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: 1/30/2023 TAT Requested (days):		<table border="1"> <tr> <th colspan="12">Analysis Requested</th> </tr> <tr> <td colspan="12"> </td> </tr> <tr> <td colspan="12"> </td> </tr> </table>						Analysis Requested																																				<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:	
Analysis Requested																																																
Project Name: IDOT - AE8-007 Site:			PO #: WO #: Project #: 50021033 SSOW#:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers		Special Instructions/Note:  <div style="font-size: 2em; text-align: center;">E169</div>																																					
<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>Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)</b>				<b>Preservation Code:</b>																																			
2852V-7-B01-1 (500-228189-1)			1/16/23		10:10 Central		Solid		X		1																																					
2852V-7-B01-2 (500-228189-2)			1/16/23		10:20 Central		Solid		X		1																																					
2852V-7-B02-1 (500-228189-3)			1/16/23		09:50 Central		Solid		X		1																																					
2852V-7-B02-2 (500-228189-4)			1/16/23		10:00 Central		Solid		X		1																																					
2852V-7-B03-1 (500-228189-5)			1/16/23		09:30 Central		Solid		X		1																																					
2852V-7-B03-2 (500-228189-6)			1/16/23		09:40 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)			Primary Deliverable Rank: 1			Special Instructions/QC Requirements:																																										
Empty Kit Relinquished by:			Date:		Time:		Method of Shipment:																																									
Relinquished by: <i>Kevin Wal</i>			Date/Time: 1/17/23 15:15		Company:		Received by: <i>[Signature]</i>			Date/Time: 1-18-23 0920		Company: EETNC																																				
Relinquished by:			Date/Time:		Company:		Received by:			Date/Time:		Company:																																				
Relinquished by:			Date/Time:		Company:		Received by:			Date/Time:		Company:																																				
Custody Seals Intact: △ Yes △ No		Custody Seal No.:				Cooler Temperature(s) °C and Other Remarks:																																										

Page 70 of 73

1/31/2023





# 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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

9548 West 47th Street (northeast corner of 47th Street and Eberly Avenue)

City: La Grange State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80551 Longitude: - 87.85934  
(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: 0310335033 BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

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

Estimated Volume of debris (cu. Yd.): 44

### 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 2852V-12-B01 WAS SAMPLED ADJACENT TO SITE 2852V-12. SEE TABLE 3h 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: 500-228183-1.

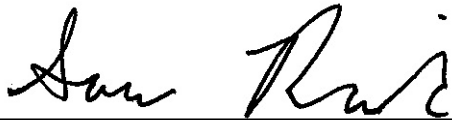
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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 5, 2023  
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 2852V-12  
Don's 47th Street

Sample ID	2852V-12-B01-1	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	1/16/2023						
PID	0						
Sample pH	8.7						
Matrix	Soil						
Inorganic Compounds, Total (mg/kg)							
Arsenic	13	1,3	11.3	--	11.3	--	13



# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 1/31/2023 5:11:23 PM

## JOB DESCRIPTION

IDOT - AE8-007

## JOB NUMBER

500-228183-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
1/31/2023 5:11:23 PM

Authorized for release by  
Jodie Bracken, Project Management Assistant II  
[Jodie.Bracken@et.eurofinsus.com](mailto:Jodie.Bracken@et.eurofinsus.com)  
Designee for  
Richard Wright, Senior Project Manager  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)  
(708)746-0045

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228183-1

**Client Sample ID: 2852V-12-B01-1**

**Lab Sample ID: 500-228183-1**

**Date Collected: 01/16/23 13:30**

**Matrix: Solid**

**Date Received: 01/17/23 11:25**

**Percent Solids: 90.2**

**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	✱	01/17/23 16:47	01/23/23 18:28	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
2-Butanone (MEK)	<0.0044		0.0044	0.0020	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Acetone	<0.018		0.018	0.0077	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Carbon disulfide	<0.0044		0.0044	0.00092	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Carbon tetrachloride	<0.0018	*+	0.0018	0.00051	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Chloroethane	<0.0044	*+	0.0044	0.0013	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00053	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	✱	01/17/23 16:47	01/23/23 18:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		70 - 134	01/17/23 16:47	01/23/23 18:28	1
4-Bromofluorobenzene (Surr)	93		75 - 131	01/17/23 16:47	01/23/23 18:28	1
Dibromofluoromethane	82		75 - 126	01/17/23 16:47	01/23/23 18:28	1
Toluene-d8 (Surr)	89		75 - 124	01/17/23 16:47	01/23/23 18:28	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	0.040	mg/Kg	✱	01/24/23 13:33	01/25/23 14:43	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	✱	01/24/23 13:33	01/25/23 14:43	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	✱	01/24/23 13:33	01/25/23 14:43	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	✱	01/24/23 13:33	01/25/23 14:43	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	✱	01/24/23 13:33	01/25/23 14:43	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228183-1

**Client Sample ID: 2852V-12-B01-1**

**Lab Sample ID: 500-228183-1**

**Date Collected: 01/16/23 13:30**

**Matrix: Solid**

**Date Received: 01/17/23 11:25**

**Percent Solids: 90.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.084	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
2-Nitrophenol	<0.36		0.36	0.087	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Benzo[a]pyrene	<0.036		0.036	0.0071	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Carbazole	<0.18		0.18	0.092	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Chrysene	<0.036		0.036	0.010	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Fluoranthene	<0.036		0.036	0.0068	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Fluorene	<0.036		0.036	0.0052	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☆	01/24/23 13:33	01/25/23 14:43	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228183-1

**Client Sample ID: 2852V-12-B01-1**

**Lab Sample ID: 500-228183-1**

Date Collected: 01/16/23 13:30

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 90.2

**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	<0.036		0.036	0.0095	mg/Kg	✱	01/24/23 13:33	01/25/23 14:43	1
Isophorone	<0.18		0.18	0.041	mg/Kg	✱	01/24/23 13:33	01/25/23 14:43	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	✱	01/24/23 13:33	01/25/23 14:43	1
Nitrobenzene	<0.036		0.036	0.0092	mg/Kg	✱	01/24/23 13:33	01/25/23 14:43	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	✱	01/24/23 13:33	01/25/23 14:43	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	✱	01/24/23 13:33	01/25/23 14:43	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	✱	01/24/23 13:33	01/25/23 14:43	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	✱	01/24/23 13:33	01/25/23 14:43	1
Phenol	<0.18		0.18	0.081	mg/Kg	✱	01/24/23 13:33	01/25/23 14:43	1
Pyrene	<0.036		0.036	0.0073	mg/Kg	✱	01/24/23 13:33	01/25/23 14:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	100		31 - 143	01/24/23 13:33	01/25/23 14:43	1
2-Fluorobiphenyl	82		43 - 145	01/24/23 13:33	01/25/23 14:43	1
2-Fluorophenol	92		31 - 166	01/24/23 13:33	01/25/23 14:43	1
Nitrobenzene-d5 (Surr)	69		37 - 147	01/24/23 13:33	01/25/23 14:43	1
Phenol-d5	84		30 - 153	01/24/23 13:33	01/25/23 14:43	1
Terphenyl-d14 (Surr)	103		42 - 157	01/24/23 13:33	01/25/23 14:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.36	J	1.0	0.20	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Arsenic	13		0.51	0.17	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Barium	16		2.5	0.29	mg/Kg	✱	01/23/23 10:27	01/26/23 22:29	5
Beryllium	0.30		0.20	0.047	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Boron	7.2		2.5	0.24	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Cadmium	0.17		0.10	0.018	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Calcium	160000		100	17	mg/Kg	✱	01/23/23 10:27	01/27/23 23:48	10
Chromium	4.3		0.51	0.25	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Cobalt	4.7		0.25	0.067	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Copper	13		0.51	0.14	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Iron	11000	^2	51	26	mg/Kg	✱	01/23/23 10:27	01/26/23 22:29	5
Lead	6.7		0.25	0.12	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Magnesium	94000		25	13	mg/Kg	✱	01/23/23 10:27	01/26/23 22:29	5
Manganese	160		0.51	0.074	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Nickel	9.4		0.51	0.15	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Potassium	900		25	9.0	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Selenium	<0.51		0.51	0.30	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Silver	0.066	J	0.25	0.066	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Sodium	190		51	7.5	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Thallium	0.33	J	0.51	0.25	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Vanadium	7.1		0.25	0.060	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	1
Zinc	20		1.0	0.45	mg/Kg	✱	01/23/23 10:27	01/25/23 21:47	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		01/30/23 09:00	01/30/23 19:11	1
Lead	0.017		0.0075	0.0075	mg/L		01/30/23 09:00	01/30/23 19:11	1
Manganese	1.7		0.025	0.010	mg/L		01/30/23 09:00	01/30/23 19:11	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228183-1

**Client Sample ID: 2852V-12-B01-1**

**Lab Sample ID: 500-228183-1**

Date Collected: 01/16/23 13:30

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 90.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.047	J	0.050	0.010	mg/L		01/30/23 09:11	01/31/23 13:17	1
Barium	0.15	J	0.50	0.050	mg/L		01/30/23 09:11	01/31/23 13:17	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/30/23 09:11	01/31/23 13:17	1
Boron	0.074	J	0.10	0.050	mg/L		01/30/23 09:11	01/31/23 13:17	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/30/23 09:11	01/31/23 13:17	1
Calcium	32		2.5	0.50	mg/L		01/30/23 09:11	01/31/23 13:17	1
Chromium	0.039		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 13:17	1
Cobalt	0.021	J	0.025	0.010	mg/L		01/30/23 09:11	01/31/23 13:17	1
Iron	56		0.40	0.20	mg/L		01/30/23 09:11	01/31/23 13:17	1
Lead	0.031		0.0075	0.0075	mg/L		01/30/23 09:11	01/31/23 13:17	1
Manganese	0.22		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 13:17	1
Nickel	0.050		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 13:17	1
Potassium	11		2.5	0.50	mg/L		01/30/23 09:11	01/31/23 13:17	1
Selenium	<0.050		0.050	0.020	mg/L		01/30/23 09:11	01/31/23 13:17	1
Silver	<0.025		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 13:17	1
Zinc	0.12	J	0.50	0.020	mg/L		01/30/23 09:11	01/31/23 13:17	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		01/30/23 09:11	01/30/23 17:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/30/23 09:11	01/30/23 17:06	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		01/30/23 10:50	01/31/23 10:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.017	0.0088	mg/Kg	⊛	01/26/23 14:20	01/27/23 08:51	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	⊛	01/23/23 14:20	01/23/23 15:54	1
pH (SW846 9045D)	8.7		0.2	0.2	SU			01/19/23 21:31	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228183-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance 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
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

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

## Glossary

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

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228183-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	12-31-23

**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 <del>TekLab, Inc.</del> <i>EuroPlas</i>	Project Name <i>AES-007A</i> 500-228183 COC	COC No <i>1</i> of <i>1</i>
	Address <del>5445 Horseshoe Lake Road Collinsville, IL 62234</del>	Project No <i>PTB/WO1 145-002107A</i>	Lab Job No <i>500-228183</i>
Phone <del>877-344-1003</del>	Contact <del>Shelly Hennessy</del>	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	Sample Temp <i>2.3 +1.2</i>
email <del>shennessy@teklabinc.com</del>	email <i>shennessy@teklabinc.com</i>	Sampler: <i>N. Coon</i>	

**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				
<i>1</i>	<i>2852V-12-B01-1</i>	<i>1116</i>	<i>1330</i>	<i>S</i>	<i>X</i>	<i>X</i>					<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>	<i>X</i>					
	<del><i>2852V-12-B01-1 DCP</i></del>			<del><i>S</i></del>	<del><i>X</i></del>	<del><i>X</i></del>					<del><i>X</i></del>	<del><i>X</i></del>	<del><i>X</i></del>	<del><i>X</i></del>	<del><i>X</i></del>					
	<del><i>2852V-12-B01-2</i></del>			<del><i>S</i></del>	<del><i>X</i></del>	<del><i>X</i></del>					<del><i>X</i></del>	<del><i>X</i></del>	<del><i>X</i></del>	<del><i>X</i></del>	<del><i>X</i></del>					
	<del><i>11</i></del>																			

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

**Comments**  
*Sample 12-B01-2 not collected*

Relinquished by <i>A. Kk</i>	Date/Time <i>1/17/23 0923</i>	Received by <i>P. Neal</i>	Date/Time <i>1/17/23 0923</i>
Relinquished by <i>P. Neal</i>	Date/Time <i>1/17/23 1125</i>	Received by <i>Stephanie Hernandez EETA</i>	Date/Time <i>1/17/23 1125</i>
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

<b>Client Information (Sub Contract Lab)</b>		Sampler:		Lab PM: Wright, Richard		Carrier Tracking No(s):		COC No: 500-169857.1									
Client Contact: Shipping/Receiving		Phone:		E-Mail: Richard.Wright@et.eurofins.us.com		State of Origin: Illinois		Page: Page 1 of 1									
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP - Illinois		Job #: 500-228183-1													
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: 1/30/2023 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 - AE8-007 Site:		Project #: 50021033 SSOW#:															
<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>Matrix (W=water, S=solid, O=waste/oil, B=Tissue, A=Alk)</b>		<b>Field Filtered Sample (Yes or No)</b>		<b>Perform MS/MSD (Yes or No)</b>		<b>Total Number of containers</b>		E169  <b>Special Instructions/Note:</b>	
2852V-12-B01-1 (500-228183-1)		1/16/23		13:30 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)				Primary Deliverable Rank: 1		Special Instructions/QC Requirements:											
Empty Kit Relinquished by:				Date:		Time:		Method of Shipment:									
Relinquished by: <i>Mack 2/16/23</i>				Date/Time: 1/17/23 15:15		Company:		Received by: <i>Jes...</i>		Date/Time: 1-18-23 0920		Company: EETNL					
Relinquished by:				Date/Time:		Company:		Received by:		Date/Time:		Company:					
Relinquished by:				Date/Time:		Company:		Received by:		Date/Time:		Company:					
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No				Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:											

Page 30 of 33

1/31/2023







# 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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

9536 West 47th Street (northwest quadrant of 47th Street and Blanchan Avenue)

City: La Grange State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80541 Longitude: - 87.85872  
(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.): 22

### 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 2852V-14-B01 WAS SAMPLED ADJACENT TO SITE 2852V-14. SEE TABLE 3i 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: 500-228188-1.

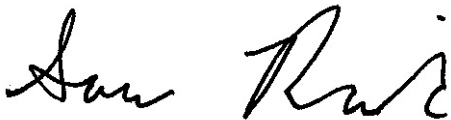
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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 5, 2023  
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 2852V-14  
Care Sheet Metal &  
Roofing**

<b>Sample ID</b>	2852V-14-B01	<b>Maximum Allowable Concentration</b>					
<b>Sample Depth (ft)</b>	0-2						
<b>Sample Date</b>	1/16/2023			<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>	8.3	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area				
<b>Matrix</b>	Soil						
<b>Semivolatile Organic Compounds (mg/kg)</b>							
Benzo(a)pyrene	0.33	1,2	0.09	0.09	0.98	11.4	2.1



# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 1/31/2023 5:24:38 PM

## JOB DESCRIPTION

IDOT - AE8-007

## JOB NUMBER

500-228188-1



# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
1/31/2023 5:24:38 PM

Authorized for release by  
Jodie Bracken, Project Management Assistant II  
[Jodie.Bracken@et.eurofinsus.com](mailto:Jodie.Bracken@et.eurofinsus.com)  
Designee for  
Richard Wright, Senior Project Manager  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)  
(708)746-0045

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228188-1

**Client Sample ID: 2852V-14-B01**

**Lab Sample ID: 500-228188-1**

**Date Collected: 01/16/23 07:50**

**Matrix: Solid**

**Date Received: 01/17/23 11:25**

**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	<0.0018		0.0018	0.00060	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
1,1,1,2-Tetrachloroethane	<0.0018	+	0.0018	0.00057	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Acetone	<0.018		0.018	0.0078	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
cis-1,3-Dichloropropene	<0.0018	+	0.0018	0.00054	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
trans-1,3-Dichloropropene	<0.0018	+	0.0018	0.00063	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	01/17/23 16:47	01/23/23 15:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		70 - 134	01/17/23 16:47	01/23/23 15:42	1
4-Bromofluorobenzene (Surr)	107		75 - 131	01/17/23 16:47	01/23/23 15:42	1
Dibromofluoromethane	97		75 - 126	01/17/23 16:47	01/23/23 15:42	1
Toluene-d8 (Surr)	112		75 - 124	01/17/23 16:47	01/23/23 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	☼	01/24/23 14:47	01/25/23 18:22	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	01/24/23 14:47	01/25/23 18:22	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	01/24/23 14:47	01/25/23 18:22	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	01/24/23 14:47	01/25/23 18:22	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	01/24/23 14:47	01/25/23 18:22	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228188-1

**Client Sample ID: 2852V-14-B01**

**Lab Sample ID: 500-228188-1**

**Date Collected: 01/16/23 07:50**

**Matrix: Solid**

**Date Received: 01/17/23 11:25**

**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	<0.38		0.38	0.088	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
2,4-Dinitrophenol	<0.77		0.77	0.68	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
2-Methylnaphthalene	<0.077		0.077	0.0071	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
4-Nitrophenol	<0.77		0.77	0.37	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
<b>Acenaphthene</b>	<b>0.015</b>	<b>J</b>	0.038	0.0069	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
<b>Acenaphthylene</b>	<b>0.019</b>	<b>J</b>	0.038	0.0051	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
<b>Anthracene</b>	<b>0.057</b>		0.038	0.0064	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
<b>Benzo[a]anthracene</b>	<b>0.28</b>		0.038	0.0052	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
<b>Benzo[a]pyrene</b>	<b>0.33</b>		0.038	0.0074	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
<b>Benzo[b]fluoranthene</b>	<b>0.46</b>		0.038	0.0083	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
<b>Benzo[g,h,i]perylene</b>	<b>0.12</b>		0.038	0.012	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
<b>Benzo[k]fluoranthene</b>	<b>0.16</b>		0.038	0.011	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Carbazole	<0.19		0.19	0.096	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
<b>Chrysene</b>	<b>0.28</b>		0.038	0.010	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
<b>Dibenz(a,h)anthracene</b>	<b>0.044</b>		0.038	0.0074	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
<b>Fluoranthene</b>	<b>0.55</b>		0.038	0.0071	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
<b>Fluorene</b>	<b>0.017</b>	<b>J</b>	0.038	0.0054	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228188-1

**Client Sample ID: 2852V-14-B01**

**Lab Sample ID: 500-228188-1**

Date Collected: 01/16/23 07:50

Matrix: Solid

Date Received: 01/17/23 11:25

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>0.12</b>	<b>*+</b>	0.038	0.010	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Isophorone	<0.19		0.19	0.043	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
<b>Naphthalene</b>	<b>0.0077</b>	<b>J</b>	0.038	0.0059	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Pentachlorophenol	<0.77		0.77	0.62	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
<b>Phenanthrene</b>	<b>0.24</b>		0.038	0.0054	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Phenol	<0.19		0.19	0.085	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
<b>Pyrene</b>	<b>0.49</b>		0.038	0.0076	mg/Kg	✳	01/24/23 14:47	01/25/23 18:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	59		31 - 143				01/24/23 14:47	01/25/23 18:22	1
2-Fluorobiphenyl	66		43 - 145				01/24/23 14:47	01/25/23 18:22	1
2-Fluorophenol	81		31 - 166				01/24/23 14:47	01/25/23 18:22	1
Nitrobenzene-d5 (Surr)	55		37 - 147				01/24/23 14:47	01/25/23 18:22	1
Phenol-d5	74		30 - 153				01/24/23 14:47	01/25/23 18:22	1
Terphenyl-d14 (Surr)	93		42 - 157				01/24/23 14:47	01/25/23 18:22	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>	1.1	0.22	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Arsenic</b>	<b>7.5</b>		0.56	0.19	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Barium</b>	<b>54</b>		0.56	0.063	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Beryllium</b>	<b>0.77</b>		0.22	0.052	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Boron</b>	<b>10</b>		2.8	0.26	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Cadmium</b>	<b>0.25</b>		0.11	0.020	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Calcium</b>	<b>54000</b>	<b>B</b>	22	3.8	mg/Kg	✳	01/24/23 10:34	01/26/23 22:24	2
<b>Chromium</b>	<b>16</b>		0.56	0.28	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Cobalt</b>	<b>8.1</b>		0.28	0.073	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Copper</b>	<b>23</b>	<b>B</b>	0.56	0.16	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Iron</b>	<b>17000</b>		11	5.8	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Lead</b>	<b>42</b>		0.28	0.13	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Magnesium</b>	<b>32000</b>		5.6	2.8	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Manganese</b>	<b>270</b>		0.56	0.081	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Nickel</b>	<b>23</b>		0.56	0.16	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Potassium</b>	<b>2100</b>		28	9.9	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Selenium</b>	<b>0.35</b>	<b>J</b>	0.56	0.33	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Silver</b>	<b>0.26</b>	<b>J</b>	0.28	0.072	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Sodium</b>	<b>260</b>		56	8.2	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
Thallium	<0.56		0.56	0.28	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Vanadium</b>	<b>18</b>		0.28	0.066	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	1
<b>Zinc</b>	<b>87</b>		1.1	0.49	mg/Kg	✳	01/24/23 10:34	01/25/23 19:32	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		01/30/23 09:00	01/30/23 18:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/30/23 09:00	01/30/23 18:51	1
<b>Manganese</b>	<b>0.31</b>		0.025	0.010	mg/L		01/30/23 09:00	01/30/23 18:51	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228188-1

**Client Sample ID: 2852V-14-B01**

**Lab Sample ID: 500-228188-1**

Date Collected: 01/16/23 07:50

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.026	J	0.050	0.010	mg/L		01/30/23 09:11	01/31/23 13:45	1
Barium	0.24	J	0.50	0.050	mg/L		01/30/23 09:11	01/31/23 13:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/30/23 09:11	01/31/23 13:45	1
Boron	0.099	J	0.10	0.050	mg/L		01/30/23 09:11	01/31/23 13:45	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/30/23 09:11	01/31/23 13:45	1
Calcium	16		2.5	0.50	mg/L		01/30/23 09:11	01/31/23 13:45	1
Chromium	0.064		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 13:45	1
Cobalt	0.014	J	0.025	0.010	mg/L		01/30/23 09:11	01/31/23 13:45	1
Iron	60		0.40	0.20	mg/L		01/30/23 09:11	01/31/23 13:45	1
Lead	0.083		0.0075	0.0075	mg/L		01/30/23 09:11	01/31/23 13:45	1
Manganese	0.24		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 13:45	1
Nickel	0.054		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 13:45	1
Potassium	15		2.5	0.50	mg/L		01/30/23 09:11	01/31/23 13:45	1
Selenium	<0.050		0.050	0.020	mg/L		01/30/23 09:11	01/31/23 13:45	1
Silver	<0.025		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 13:45	1
Zinc	0.25	J	0.50	0.020	mg/L		01/30/23 09:11	01/31/23 13:45	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		01/30/23 09:00	01/31/23 12:30	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		01/30/23 09:11	01/30/23 17:29	1
Thallium	0.0023		0.0020	0.0020	mg/L		01/30/23 09:11	01/30/23 17:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		01/30/23 10:50	01/31/23 10:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044		0.019	0.0098	mg/Kg	✱	01/25/23 14:20	01/26/23 11:18	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.24	J B	0.59	0.22	mg/Kg	✱	01/23/23 15:50	01/23/23 16:50	1
pH (SW846 9045D)	8.3		0.2	0.2	SU			01/19/23 21:56	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228188-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

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

### Metals

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.

### General Chemistry

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.

## Glossary

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

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228188-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	12-31-23





# CHAIN OF CUSTODY RECORD

500-228188 COC

<b>Client Contact</b>		Project Name <u>AES-007A</u>			COC No <u>1</u> of <u>1</u>		
Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com		Lab <del>TekLab, Inc.</del> <u>EuroFins</u>	Project No <u>PTB/WO: 145-002/07A</u>		Lab Job No <u>500-228188</u>		
		Address <u>5445 Horseshoe Lake Road</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		Sample Temp <u>2.4-1.5</u>		
		<del>Gollinsville, IL 62234</del>	Sampler: <u>J. Radulovic</u>				
		Phone <u>877-344-1003</u>					
		Contact <u>Shelly Hennessy</u>					
		email <u>shennessy@teklabinc.com</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				

<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	2852v-14-B01	1/16/23	7:50	S	X	X					X	X	X	X	X					

Relinquished by <u>J. Radulovic</u>	Date/Time <u>1/17/23 0923</u>	Received by <u>P. Neal</u>	Date/Time <u>1/17/23 0923</u>
Relinquished by <u>P. Neal</u>	Date/Time <u>1/17/23 1125</u>	Received by <u>J. Radulovic</u>	Date/Time <u>1-17-23 1125</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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

9518 West 47th Street (northeast corner of 47th Street and Blanchan Avenue)

City: Brookfield State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80541 Longitude: - 87.85799  
(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: 0310335063 BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

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

Estimated Volume of debris (cu. Yd.): 11

### 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 2852V-16-B01 WAS SAMPLED ADJACENT TO SITE 2852V-16. SEE TABLE 3k 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: 500-228178-1.

**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 5, 2023  
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 2852V-16**  
**Accurate Automotive**

<b>Sample ID</b>	2852V-16-B01	<b>Maximum Allowable Concentration</b>				
<b>Sample Depth (ft)</b>	0-2					
<b>Sample Date</b>	1/16/2023					
<b>PID</b>	0					
<b>Sample pH</b>	8.9					
<b>Matrix</b>	Soil	<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>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 1/31/2023 5:02:05 PM

## JOB DESCRIPTION

IDOT - AE8-007

## JOB NUMBER

500-228178-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
1/31/2023 5:02:05 PM

Authorized for release by  
Jodie Bracken, Project Management Assistant II  
[Jodie.Bracken@et.eurofinsus.com](mailto:Jodie.Bracken@et.eurofinsus.com)  
Designee for  
Richard Wright, Senior Project Manager  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)  
(708)746-0045

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228178-1

**Client Sample ID: 2852V-16-B01**

**Lab Sample ID: 500-228178-1**

Date Collected: 01/16/23 11:20

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 83.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00054	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
1,1-Dichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Acetone	<0.017		0.017	0.0073	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Chloromethane	<0.0042		0.0042	0.0017	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
cis-1,3-Dichloropropene	<0.0017	*	0.0017	0.00051	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Methylene Chloride	<0.0042		0.0042	0.0017	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
trans-1,3-Dichloropropene	<0.0017	*	0.0017	0.00059	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1
Xylenes, Total	<0.0034		0.0034	0.00054	mg/Kg	☼	01/17/23 16:47	01/22/23 19:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 134	01/17/23 16:47	01/22/23 19:57	1
4-Bromofluorobenzene (Surr)	89		75 - 131	01/17/23 16:47	01/22/23 19:57	1
Dibromofluoromethane	112		75 - 126	01/17/23 16:47	01/22/23 19:57	1
Toluene-d8 (Surr)	84		75 - 124	01/17/23 16:47	01/22/23 19:57	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	☼	01/23/23 14:10	01/24/23 17:07	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	01/23/23 14:10	01/24/23 17:07	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	01/23/23 14:10	01/24/23 17:07	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	01/23/23 14:10	01/24/23 17:07	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	01/23/23 14:10	01/24/23 17:07	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228178-1

**Client Sample ID: 2852V-16-B01**

**Lab Sample ID: 500-228178-1**

**Date Collected: 01/16/23 11:20**

**Matrix: Solid**

**Date Received: 01/17/23 11:25**

**Percent Solids: 83.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
<b>Benzo[a]anthracene</b>	<b>0.0058</b>	<b>J</b>	0.038	0.0052	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
<b>Benzo[a]pyrene</b>	<b>0.0098</b>	<b>J</b>	0.038	0.0075	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
<b>Benzo[b]fluoranthene</b>	<b>0.013</b>	<b>J</b>	0.038	0.0083	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Carbazole	<0.19		0.19	0.096	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Chrysene	<0.038		0.038	0.010	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Hexachlorobenzene	<0.078		0.078	0.0089	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	✳	01/23/23 14:10	01/24/23 17:07	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228178-1

**Client Sample ID: 2852V-16-B01**

**Lab Sample ID: 500-228178-1**

Date Collected: 01/16/23 11:20

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 83.9

**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	<0.038		0.038	0.010	mg/Kg	✱	01/23/23 14:10	01/24/23 17:07	1
Isophorone	<0.19		0.19	0.043	mg/Kg	✱	01/23/23 14:10	01/24/23 17:07	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	✱	01/23/23 14:10	01/24/23 17:07	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	✱	01/23/23 14:10	01/24/23 17:07	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	✱	01/23/23 14:10	01/24/23 17:07	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	✱	01/23/23 14:10	01/24/23 17:07	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	✱	01/23/23 14:10	01/24/23 17:07	1
Phenanthrene	<0.038		0.038	0.0054	mg/Kg	✱	01/23/23 14:10	01/24/23 17:07	1
Phenol	<0.19		0.19	0.086	mg/Kg	✱	01/23/23 14:10	01/24/23 17:07	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	✱	01/23/23 14:10	01/24/23 17:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	89		31 - 143				01/23/23 14:10	01/24/23 17:07	1
2-Fluorobiphenyl	70		43 - 145				01/23/23 14:10	01/24/23 17:07	1
2-Fluorophenol	84		31 - 166				01/23/23 14:10	01/24/23 17:07	1
Nitrobenzene-d5 (Surr)	60		37 - 147				01/23/23 14:10	01/24/23 17:07	1
Phenol-d5	76		30 - 153				01/23/23 14:10	01/24/23 17:07	1
Terphenyl-d14 (Surr)	91		42 - 157				01/23/23 14:10	01/24/23 17:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.69	J	1.1	0.22	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Arsenic	11		0.57	0.19	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Barium	47		0.57	0.065	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Beryllium	0.98		0.23	0.053	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Boron	11		2.8	0.27	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Cadmium	0.17		0.11	0.020	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Calcium	41000		23	3.9	mg/Kg	✱	01/23/23 10:27	01/26/23 22:16	2
Chromium	18		0.57	0.28	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Cobalt	18		0.28	0.075	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Copper	30		0.57	0.16	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Iron	24000		11	5.9	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Lead	22		0.28	0.13	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Magnesium	23000		5.7	2.8	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Manganese	410		0.57	0.083	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Nickel	41		0.57	0.17	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Potassium	2600		28	10	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Selenium	0.42	J	0.57	0.33	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Silver	0.28		0.28	0.073	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Sodium	2100		57	8.4	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Thallium	<0.57		0.57	0.28	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Vanadium	23		0.28	0.067	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	1
Zinc	72		1.1	0.50	mg/Kg	✱	01/23/23 10:27	01/25/23 21:33	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		01/30/23 09:00	01/30/23 18:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/30/23 09:00	01/30/23 18:19	1
Chromium	<0.025		0.025	0.010	mg/L		01/30/23 09:00	01/30/23 18:19	1
Iron	<0.40		0.40	0.20	mg/L		01/30/23 09:00	01/30/23 18:19	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228178-1

**Client Sample ID: 2852V-16-B01**

**Lab Sample ID: 500-228178-1**

Date Collected: 01/16/23 11:20

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 83.9

**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		01/30/23 09:00	01/30/23 18:19	1
<b>Manganese</b>	<b>0.074</b>		0.025	0.010	mg/L		01/30/23 09:00	01/30/23 18:19	1
Nickel	<0.025		0.025	0.010	mg/L		01/30/23 09:00	01/30/23 18:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.075</b>		0.050	0.010	mg/L		01/30/23 09:11	01/31/23 12:58	1
<b>Barium</b>	<b>0.49</b>	J	0.50	0.050	mg/L		01/30/23 09:11	01/31/23 12:58	1
<b>Beryllium</b>	<b>0.0093</b>		0.0040	0.0040	mg/L		01/30/23 09:11	01/31/23 12:58	1
<b>Boron</b>	<b>0.18</b>		0.10	0.050	mg/L		01/30/23 09:11	01/31/23 12:58	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/30/23 09:11	01/31/23 12:58	1
<b>Calcium</b>	<b>32</b>		2.5	0.50	mg/L		01/30/23 09:11	01/31/23 12:58	1
<b>Chromium</b>	<b>0.17</b>		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 12:58	1
<b>Cobalt</b>	<b>0.056</b>		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 12:58	1
<b>Iron</b>	<b>180</b>		0.40	0.20	mg/L		01/30/23 09:11	01/31/23 12:58	1
<b>Lead</b>	<b>0.090</b>		0.0075	0.0075	mg/L		01/30/23 09:11	01/31/23 12:58	1
<b>Manganese</b>	<b>0.77</b>		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 12:58	1
<b>Nickel</b>	<b>0.20</b>		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 12:58	1
<b>Potassium</b>	<b>31</b>		2.5	0.50	mg/L		01/30/23 09:11	01/31/23 12:58	1
Selenium	<0.050		0.050	0.020	mg/L		01/30/23 09:11	01/31/23 12:58	1
Silver	<0.025		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 12:58	1
<b>Zinc</b>	<b>0.44</b>	J	0.50	0.020	mg/L		01/30/23 09:11	01/31/23 12:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		01/30/23 09:00	01/31/23 12:20	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/30/23 09:00	01/31/23 12:20	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.0093</b>		0.0060	0.0060	mg/L		01/30/23 09:11	01/30/23 16:58	1
<b>Thallium</b>	<b>0.0076</b>		0.0020	0.0020	mg/L		01/30/23 09:11	01/30/23 16:58	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		01/30/23 10:50	01/31/23 10:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.050</b>		0.019	0.010	mg/Kg	☼	01/26/23 14:20	01/27/23 08:43	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.27</b>	J B	0.60	0.23	mg/Kg	☼	01/23/23 14:13	01/23/23 15:44	1
<b>pH (SW846 9045D)</b>	<b>8.9</b>		0.2	0.2	SU			01/19/23 19:37	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228178-1

## Qualifiers

### GC/MS VOA

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

### General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228178-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	12-31-23





# CHAIN OF CUSTODY RECORD



<b>Client Contact</b>	<b>Laboratory</b>	Project Name <u>AEB-007A</u>	500-228178 COC	JOC No
Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	Lab <del>TekLab, Inc.</del> <u>EuroFINS</u> Address <u>5445 Horseshoe Lake Road</u> <u>Collinsville, IL 62234</u> Phone <u>877-344-1003</u> Contact <u>Shelly Hennessy</u> email <u>shennessy@teklabinc.com</u>	Project No <u>PTB/WO: 145-002/07A</u>		<u>1</u> of <u>1</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>500-228178</u>
		Sampler: <u>N. Cow / S. Kh Jai</u>		Sample Temp <u>2.2 ± 1.1</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**

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization		
1	2852V-16-B01	1/16	1120	S	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		
1	2852V-16-B01	1/16	1120	S	X	X					X	X	X	X	X			

Relinquished by <u>AKH</u>	Date/Time <u>1/17/23 0923</u>	Received by <u>P. Neal</u>	Date/Time <u>1/17/23 0923</u>
Relinquished by <u>P. Neal</u>	Date/Time <u>1/17/23 1125</u>	Received by <u>Stephanie Hernandez EEA</u>	Date/Time <u>1/17/23 1125</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

<b>Client Information (Sub Contract Lab)</b>	Sampler: Wright, Richard	Lab PM: Wright, Richard	Carrier Tracking No(s):	COC No: 500-169853.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Richard.Wright@et.eurofinsus.com	State of Origin: Illinois	Page: Page 1 of 1
Company: Eurofins Environment Testing North Cent	Accreditations Required (See note): NELAP - Illinois			Job #: 500-228178-1

Address: 180 S. Van Buren Avenue,  
City: Barberton  
State, Zip: OH, 44203  
Phone: 330-497-9396(Tel) 330-497-0772(Fax)  
Email:  
Project Name: IDOT - AE8-007  
Site:

Due Date Requested: 1/30/2023  
TAT Requested (days):  
PO #:  
WO #:  
Project #: 50021033  
SSOW#:

Analysis Requested	
Field Filtered Sample (Yes or No)	
Perform MS/MSD (Yes or No)	
9012B/9012B_Prep Cyanide, Total	
Total Number of Containers	

**Preservation Codes:**

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
Other:	Z - other (specify)

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, B=tissue, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B/9012B_Prep Cyanide, Total	Total Number of Containers	Special Instructions/Note:
2852V-16-B01 (500-228178-1)	1/16/23	11:20 Central		Solid		X		1	E169

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>Macelli 2 Waul</i>	Date/Time: <i>1/17/23 15:15</i>	Company:	Received by: <i>[Signature]</i>
Relinquished by:	Date/Time:	Company:	Date/Time: <i>1-18-23 0920</i>
Relinquished by:	Date/Time:	Company:	Company: <i>EEITNC</i>

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
-----------------------------------------------------------------------------------	-------------------	---------------------------------------------

Page 31 of 34

1/31/2023





# 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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

9436 West 47th Street (northwest quadrant of 47th Street and Deyo Avenue)

City: Brookfield State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80542 Longitude: - 87.85633  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

Additional BOL: 0310335103

IEPA Site Number(s), if assigned: BOL: 0310335101 BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

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

Estimated Volume of debris (cu. Yd.): 26

### 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 2852V-22-B01 WAS SAMPLED ADJACENT TO SITE 2852V-22. SEE TABLE 3o 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: 500-228180-1.

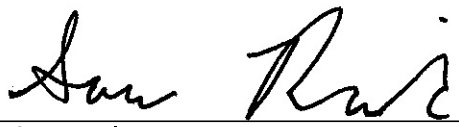
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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 5, 2023  
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 2852V-22  
 Powder Coating  
 Specialists

Sample ID	2852V-22-B01-1		Maximum Allowable Concentration				
Sample Depth (ft)	0-6						
Sample Date	1/16/2023						
PID	0						
Sample pH	7.9						
Matrix	Soil		<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
Semivolatile Organic Compounds (mg/kg)							
Benzo(a)pyrene	0.32	1.2	0.09	0.09	0.98	11.4	2.1



# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 1/31/2023 5:04:07 PM

## JOB DESCRIPTION

IDOT - AE8-007

## JOB NUMBER

500-228180-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
1/31/2023 5:04:07 PM

Authorized for release by  
Jodie Bracken, Project Management Assistant II  
[Jodie.Bracken@et.eurofinsus.com](mailto:Jodie.Bracken@et.eurofinsus.com)  
Designee for  
Richard Wright, Senior Project Manager  
[Richard.Wright@et.eurofinsus.com](mailto:Richard.Wright@et.eurofinsus.com)  
(708)746-0045

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228180-1

**Client Sample ID: 2852V-22-B01-1**

**Lab Sample ID: 500-228180-1**

**Date Collected: 01/16/23 11:00**

**Matrix: Solid**

**Date Received: 01/17/23 11:25**

**Percent Solids: 80.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0021		0.0021	0.00072	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00068	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00092	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
1,1-Dichloroethane	<0.0021		0.0021	0.00073	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
1,1-Dichloroethene	<0.0021		0.0021	0.00074	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
1,2-Dichloroethane	<0.0054		0.0054	0.0017	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
1,2-Dichloropropane	<0.0021		0.0021	0.00055	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00075	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
2-Butanone (MEK)	<0.0054		0.0054	0.0024	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
2-Hexanone	<0.0054		0.0054	0.0017	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0016	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Acetone	<0.021		0.021	0.0093	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Benzene	<0.0021		0.0021	0.00055	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Bromodichloromethane	<0.0021		0.0021	0.00044	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Bromoform	<0.0021		0.0021	0.00063	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Bromomethane	<0.0054		0.0054	0.0020	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Carbon disulfide	<0.0054		0.0054	0.0011	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Carbon tetrachloride	<0.0021		0.0021	0.00062	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Chlorobenzene	<0.0021		0.0021	0.00079	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Chloroethane	<0.0054		0.0054	0.0016	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Chloroform	<0.0021		0.0021	0.00074	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Chloromethane	<0.0054		0.0054	0.0022	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00060	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
cis-1,3-Dichloropropene	<0.0021	*	0.0021	0.00065	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Dibromochloromethane	<0.0021		0.0021	0.00070	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00063	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Methylene Chloride	<0.0054		0.0054	0.0021	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Styrene	<0.0021		0.0021	0.00065	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Tetrachloroethene	<0.0021		0.0021	0.00073	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Toluene	<0.0021		0.0021	0.00054	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00095	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
trans-1,3-Dichloropropene	<0.0021	*	0.0021	0.00075	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Trichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Vinyl chloride	<0.0021		0.0021	0.00095	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1
Xylenes, Total	<0.0043		0.0043	0.00069	mg/Kg	☼	01/17/23 16:47	01/22/23 20:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	110		70 - 134	01/17/23 16:47	01/22/23 20:22	1
4-Bromofluorobenzene (Surr)	91		75 - 131	01/17/23 16:47	01/22/23 20:22	1
Dibromofluoromethane	113		75 - 126	01/17/23 16:47	01/22/23 20:22	1
Toluene-d8 (Surr)	86		75 - 124	01/17/23 16:47	01/22/23 20:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.31		0.31	0.066	mg/Kg	☼	01/23/23 14:10	01/24/23 21:31	1
1,2-Dichlorobenzene	<0.31		0.31	0.073	mg/Kg	☼	01/23/23 14:10	01/24/23 21:31	1
1,3-Dichlorobenzene	<0.31		0.31	0.069	mg/Kg	☼	01/23/23 14:10	01/24/23 21:31	1
1,4-Dichlorobenzene	<0.31		0.31	0.079	mg/Kg	☼	01/23/23 14:10	01/24/23 21:31	1
2,2'-oxybis[1-chloropropane]	<0.31		0.31	0.071	mg/Kg	☼	01/23/23 14:10	01/24/23 21:31	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228180-1

**Client Sample ID: 2852V-22-B01-1**

**Lab Sample ID: 500-228180-1**

**Date Collected: 01/16/23 11:00**

**Matrix: Solid**

**Date Received: 01/17/23 11:25**

**Percent Solids: 80.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.61		0.61	0.14	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
2,4,6-Trichlorophenol	<0.61		0.61	0.21	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
2,4-Dichlorophenol	<0.61		0.61	0.15	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
2,4-Dimethylphenol	<0.61		0.61	0.23	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
2,4-Dinitrophenol	<1.2		1.2	1.1	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
2,4-Dinitrotoluene	<0.31		0.31	0.097	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
2,6-Dinitrotoluene	<0.31		0.31	0.12	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
2-Chloronaphthalene	<0.31		0.31	0.068	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
2-Chlorophenol	<0.31		0.31	0.10	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
2-Methylnaphthalene	<0.12		0.12	0.011	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
2-Methylphenol	<0.31		0.31	0.098	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
2-Nitroaniline	<0.31		0.31	0.082	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
2-Nitrophenol	<0.61		0.61	0.14	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
3 & 4 Methylphenol	<0.31		0.31	0.10	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
3,3'-Dichlorobenzidine	<0.31		0.31	0.086	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
3-Nitroaniline	<0.61		0.61	0.19	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
4,6-Dinitro-2-methylphenol	<1.2		1.2	0.49	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
4-Bromophenyl phenyl ether	<0.31		0.31	0.081	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
4-Chloro-3-methylphenol	<0.61		0.61	0.21	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
4-Chloroaniline	<1.2		1.2	0.29	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
4-Chlorophenyl phenyl ether	<0.31		0.31	0.072	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
4-Nitroaniline	<0.61		0.61	0.26	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
4-Nitrophenol	<1.2		1.2	0.58	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Acenaphthene	<0.061		0.061	0.011	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
<b>Acenaphthylene</b>	<b>0.080</b>		0.061	0.0081	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
<b>Anthracene</b>	<b>0.028 J</b>		0.061	0.010	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
<b>Benzo[a]anthracene</b>	<b>0.23</b>		0.061	0.0082	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
<b>Benzo[a]pyrene</b>	<b>0.32</b>		0.061	0.012	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
<b>Benzo[b]fluoranthene</b>	<b>0.42</b>		0.061	0.013	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
<b>Benzo[g,h,i]perylene</b>	<b>0.15</b>		0.061	0.020	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
<b>Benzo[k]fluoranthene</b>	<b>0.15</b>		0.061	0.018	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Bis(2-chloroethoxy)methane	<0.31		0.31	0.063	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Bis(2-chloroethyl)ether	<0.31		0.31	0.092	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Bis(2-ethylhexyl) phthalate	<0.31		0.31	0.11	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Butyl benzyl phthalate	<0.31		0.31	0.12	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Carbazole	<0.31		0.31	0.15	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
<b>Chrysene</b>	<b>0.29</b>		0.061	0.017	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
<b>Dibenz(a,h)anthracene</b>	<b>0.064</b>		0.061	0.012	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Dibenzofuran	<0.31		0.31	0.072	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Diethyl phthalate	<0.31		0.31	0.10	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Dimethyl phthalate	<0.31		0.31	0.080	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Di-n-butyl phthalate	<0.31		0.31	0.093	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Di-n-octyl phthalate	<0.31		0.31	0.10	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
<b>Fluoranthene</b>	<b>0.36</b>		0.061	0.011	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Fluorene	<0.061		0.061	0.0086	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Hexachlorobenzene	<0.12		0.12	0.014	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Hexachlorobutadiene	<0.31		0.31	0.096	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Hexachlorocyclopentadiene	<1.2		1.2	0.35	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1
Hexachloroethane	<0.31		0.31	0.093	mg/Kg	✳	01/23/23 14:10	01/24/23 21:31	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228180-1

**Client Sample ID: 2852V-22-B01-1**

**Lab Sample ID: 500-228180-1**

Date Collected: 01/16/23 11:00

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 80.0

**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>0.17</b>		0.061	0.016	mg/Kg	☼	01/23/23 14:10	01/24/23 21:31	1
Isophorone	<0.31		0.31	0.069	mg/Kg	☼	01/23/23 14:10	01/24/23 21:31	1
Naphthalene	<0.061		0.061	0.0094	mg/Kg	☼	01/23/23 14:10	01/24/23 21:31	1
Nitrobenzene	<0.061		0.061	0.015	mg/Kg	☼	01/23/23 14:10	01/24/23 21:31	1
N-Nitrosodi-n-propylamine	<0.12		0.12	0.075	mg/Kg	☼	01/23/23 14:10	01/24/23 21:31	1
N-Nitrosodiphenylamine	<0.31		0.31	0.072	mg/Kg	☼	01/23/23 14:10	01/24/23 21:31	1
Pentachlorophenol	<1.2		1.2	0.98	mg/Kg	☼	01/23/23 14:10	01/24/23 21:31	1
<b>Phenanthrene</b>	<b>0.080</b>		0.061	0.0085	mg/Kg	☼	01/23/23 14:10	01/24/23 21:31	1
Phenol	<0.31		0.31	0.14	mg/Kg	☼	01/23/23 14:10	01/24/23 21:31	1
<b>Pyrene</b>	<b>0.30</b>		0.061	0.012	mg/Kg	☼	01/23/23 14:10	01/24/23 21:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	78		31 - 143				01/23/23 14:10	01/24/23 21:31	1
2-Fluorobiphenyl	63		43 - 145				01/23/23 14:10	01/24/23 21:31	1
2-Fluorophenol	80		31 - 166				01/23/23 14:10	01/24/23 21:31	1
Nitrobenzene-d5 (Surr)	55		37 - 147				01/23/23 14:10	01/24/23 21:31	1
Phenol-d5	56		30 - 153				01/23/23 14:10	01/24/23 21:31	1
Terphenyl-d14 (Surr)	77		42 - 157				01/23/23 14:10	01/24/23 21:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.46</b>	J	1.2	0.23	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Arsenic</b>	<b>9.0</b>		0.58	0.20	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Barium</b>	<b>74</b>		0.58	0.066	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Beryllium</b>	<b>0.89</b>		0.23	0.054	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Boron</b>	<b>9.3</b>		2.9	0.27	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Cadmium</b>	<b>0.45</b>		0.12	0.021	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Calcium</b>	<b>41000</b>		23	3.9	mg/Kg	☼	01/23/23 10:27	01/26/23 22:20	2
<b>Chromium</b>	<b>15</b>		0.58	0.29	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Cobalt</b>	<b>8.6</b>		0.29	0.076	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Copper</b>	<b>26</b>		0.58	0.16	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Iron</b>	<b>19000</b>		12	6.0	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Lead</b>	<b>48</b>		0.29	0.13	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Magnesium</b>	<b>24000</b>		5.8	2.9	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Manganese</b>	<b>240</b>		0.58	0.084	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Nickel</b>	<b>24</b>		0.58	0.17	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Potassium</b>	<b>1800</b>		29	10	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Selenium</b>	<b>0.46</b>	J	0.58	0.34	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Silver</b>	<b>0.26</b>	J	0.29	0.075	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Sodium</b>	<b>1300</b>		58	8.6	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
Thallium	<0.58		0.58	0.29	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Vanadium</b>	<b>23</b>		0.29	0.068	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	1
<b>Zinc</b>	<b>100</b>		1.2	0.51	mg/Kg	☼	01/23/23 10:27	01/25/23 21:36	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		01/30/23 09:00	01/30/23 18:22	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/30/23 09:00	01/30/23 18:22	1
<b>Manganese</b>	<b>0.32</b>		0.025	0.010	mg/L		01/30/23 09:00	01/30/23 18:22	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228180-1

**Client Sample ID: 2852V-22-B01-1**

**Lab Sample ID: 500-228180-1**

Date Collected: 01/16/23 11:00

Matrix: Solid

Date Received: 01/17/23 11:25

Percent Solids: 80.0

**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		01/30/23 09:11	01/31/23 13:01	1
Barium	0.25	J	0.50	0.050	mg/L		01/30/23 09:11	01/31/23 13:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/30/23 09:11	01/31/23 13:01	1
Boron	0.076	J	0.10	0.050	mg/L		01/30/23 09:11	01/31/23 13:01	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/30/23 09:11	01/31/23 13:01	1
Calcium	11		2.5	0.50	mg/L		01/30/23 09:11	01/31/23 13:01	1
Chromium	0.054		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 13:01	1
Cobalt	0.012	J	0.025	0.010	mg/L		01/30/23 09:11	01/31/23 13:01	1
Iron	44		0.40	0.20	mg/L		01/30/23 09:11	01/31/23 13:01	1
Lead	0.052		0.0075	0.0075	mg/L		01/30/23 09:11	01/31/23 13:01	1
Manganese	0.27		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 13:01	1
Nickel	0.041		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 13:01	1
Potassium	11		2.5	0.50	mg/L		01/30/23 09:11	01/31/23 13:01	1
Selenium	<0.050		0.050	0.020	mg/L		01/30/23 09:11	01/31/23 13:01	1
Silver	<0.025		0.025	0.010	mg/L		01/30/23 09:11	01/31/23 13:01	1
Zinc	0.20	J	0.50	0.020	mg/L		01/30/23 09:11	01/31/23 13:01	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		01/30/23 09:00	01/31/23 12:26	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		01/30/23 09:11	01/30/23 17:00	1
Thallium	0.0021		0.0020	0.0020	mg/L		01/30/23 09:11	01/30/23 17:00	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		01/30/23 10:50	01/31/23 10:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.067		0.019	0.010	mg/Kg	✱	01/26/23 14:20	01/27/23 08:44	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.44	J B	0.63	0.24	mg/Kg	✱	01/23/23 14:17	01/23/23 15:49	1
pH (SW846 9045D)	7.9		0.2	0.2	SU			01/19/23 21:24	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228180-1

## Qualifiers

### GC/MS VOA

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

### General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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



# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228180-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	12-31-23

# CHAIN OF CUSTODY RECORD



<b>Client Contact</b>	<b>Laboratory</b>	Project Name <u>AE3-007A</u> 500-228180 COC	JC No <u>1</u> of <u>1</u>
Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com	Lab <del>TekLab, Inc.</del> <u>EuroFINS</u> Address <del>5445 Horseshoe Lake Road</del> <del>Collinsville, IL 62234</del> Phone <del>877-344-1003</del> Contact <del>Shelly Hennessy</del> email <del>shennessy@teklabinc.com</del>	Project No <u>PTB/w.o. 145-002/07A</u>	Lab Job No <u>500-228180</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	Sample Temp <u>2.2 + 1.1</u>
		Sampler: <u>N. Coiro / S. Khodaei</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	2852V-22-B01-1	1/16	1100	S	X	X					X	X	X	X	X			
	2852V-22-B01-2			S	X	X					X	X	X	X	X			Sample 22-B01-2 not collected

Relinquished by <u>A. Kw</u>	Date/Time <u>1/17/23 0923</u>	Received by <u>R. Neal</u>	Date/Time <u>1/17/23 0923</u>
Relinquished by <u>R. Neal</u>	Date/Time <u>1/17/23 1125</u>	Received by <u>Stephanie Hernandez EETA</u>	Date/Time <u>1/17/23 1125</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

<b>Client Information (Sub Contract Lab)</b>		Sampler:		Lab PM: Wright, Richard		Carrier Tracking No(s):		COC No: 500-169854.1			
Client Contact: Shipping/Receiving		Phone:		E-Mail: Richard.Wright@et.eurofinsus.com		State of Origin: Illinois		Page: Page 1 of 1			
Company: Eurofins Environment Testing North Centr				Accreditations Required (See note): NELAP - Illinois				Job #: 500-228180-1			
Address: 180 S. Van Buren Avenue,		Due Date Requested: 1/30/2023		<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)	
City: Barberton		TAT Requested (days):									
State, Zip: OH, 44203		PO #:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers			
Phone: 330-497-9396(Tel) 330-497-0772(Fax)		WO #:									
Email:		Project #: 50021033		9012B/9012B_Prep Cyanide, Total							
Project Name: IDOT - AE8-007		SSOW#:									
Site:											
<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>Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)</b>	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers	<b>Special Instructions/Note:</b>		
2852V-22-B01-1 (500-228180-1)		1/16/23	11:00 Central		Solid		X	1	E169		
Preservation Code:											

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>April 2. Waul</i>		Date/Time: 1/17/23 15:15		Company:		Received by: <i>[Signature]</i>		Date/Time: 1-18-23 0920		Company: EETNC	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:	

Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:							
-------------------------------------	--	-------------------	--	---------------------------------------------	--	--	--	--	--	--	--

Page 31 of 34

1/31/2023





# 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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

9312 West 47th Street (northeast corner of 47th Street and Raymond Avenue)

City: Brookfield State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80547 Longitude: - 87.85421  
(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.): 59

### 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 2852V-30-B01 WAS SAMPLED ADJACENT TO SITE 2852V-30. SEE TABLE 3s 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: 500-228448-1.

**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 5, 2023  
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 2852V-30  
 Spirit of America Car  
 Wash

Sample ID	2852V-30-B01	Maximum Allowable Concentration				
Sample Depth (ft)	0-2					
Sample Date	1/20/2023	<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	8.2					
Matrix	Soil					
No Contaminants of Concern Noted.						



# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 2/6/2023 3:18:13 PM

## JOB DESCRIPTION

IDOT - AE8-007

## JOB NUMBER

500-228448-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
2/6/2023 3:18:13 PM

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228448-1

**Client Sample ID: 2852V-30-B01**

**Lab Sample ID: 500-228448-1**

Date Collected: 01/20/23 11:20

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 79.8

**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	0.00062	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00064	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
<b>Acetone</b>	<b>0.027</b>	<b>+</b>	0.018	0.0080	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Carbon disulfide	<0.0046		0.0046	0.00095	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00064	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	01/21/23 11:30	01/27/23 16:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 134	01/21/23 11:30	01/27/23 16:37	1
4-Bromofluorobenzene (Surr)	85		75 - 131	01/21/23 11:30	01/27/23 16:37	1
Dibromofluoromethane	110		75 - 126	01/21/23 11:30	01/27/23 16:37	1
Toluene-d8 (Surr)	87		75 - 124	01/21/23 11:30	01/27/23 16:37	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	☼	01/31/23 07:51	01/31/23 19:26	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	01/31/23 07:51	01/31/23 19:26	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	01/31/23 07:51	01/31/23 19:26	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	01/31/23 07:51	01/31/23 19:26	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	01/31/23 07:51	01/31/23 19:26	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228448-1

**Client Sample ID: 2852V-30-B01**

**Lab Sample ID: 500-228448-1**

**Date Collected: 01/20/23 11:20**

**Matrix: Solid**

**Date Received: 01/20/23 16:11**

**Percent Solids: 79.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
<b>2-Methylnaphthalene</b>	<b>0.010</b>	<b>J</b>	0.084	0.0076	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
4,6-Dinitro-2-methylphenol	<0.84		0.84	0.33	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
4-Chlorophenyl phenyl ether	<0.21	*+	0.21	0.049	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
<b>Benzo[a]anthracene</b>	<b>0.0090</b>	<b>J</b>	0.041	0.0056	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
<b>Benzo[a]pyrene</b>	<b>0.013</b>	<b>J</b>	0.041	0.0080	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
<b>Benzo[b]fluoranthene</b>	<b>0.020</b>	<b>J</b>	0.041	0.0090	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Carbazole	<0.21		0.21	0.10	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
<b>Chrysene</b>	<b>0.013</b>	<b>J</b>	0.041	0.011	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Dimethyl phthalate	<0.21	*+	0.21	0.054	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
<b>Di-n-octyl phthalate</b>	<b>0.13</b>	<b>J</b>	0.21	0.068	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
<b>Fluoranthene</b>	<b>0.013</b>	<b>J</b>	0.041	0.0077	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Hexachlorobenzene	<0.084		0.084	0.0096	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Hexachlorobutadiene	<0.21	*+	0.21	0.065	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228448-1

**Client Sample ID: 2852V-30-B01**

**Lab Sample ID: 500-228448-1**

Date Collected: 01/20/23 11:20

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 79.8

**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>0.011</b>	<b>J</b>	0.041	0.011	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Isophorone	<0.21		0.21	0.047	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
<b>Naphthalene</b>	<b>0.025</b>	<b>J</b>	0.041	0.0064	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
N-Nitrosodi-n-propylamine	<0.084		0.084	0.051	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
<b>Phenanthrene</b>	<b>0.0059</b>	<b>J</b>	0.041	0.0058	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
Phenol	<0.21		0.21	0.092	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	1
<b>Pyrene</b>	<b>0.011</b>	<b>J</b>	0.041	0.0083	mg/Kg	✱	01/31/23 07:51	01/31/23 19:26	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	114		31 - 143				01/31/23 07:51	01/31/23 19:26	1
2-Fluorobiphenyl	83		43 - 145				01/31/23 07:51	01/31/23 19:26	1
2-Fluorophenol	84		31 - 166				01/31/23 07:51	01/31/23 19:26	1
Nitrobenzene-d5 (Surr)	70		37 - 147				01/31/23 07:51	01/31/23 19:26	1
Phenol-d5	79		30 - 153				01/31/23 07:51	01/31/23 19:26	1
Terphenyl-d14 (Surr)	108		42 - 157				01/31/23 07:51	01/31/23 19:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.29</b>	<b>J</b>	1.2	0.24	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Arsenic</b>	<b>7.8</b>		0.61	0.21	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Barium</b>	<b>65</b>		0.61	0.069	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Beryllium</b>	<b>0.72</b>		0.24	0.057	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Boron</b>	<b>5.3</b>		3.0	0.28	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Cadmium</b>	<b>0.21</b>		0.12	0.022	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Calcium</b>	<b>17000</b>	<b>B</b>	12	2.1	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Chromium</b>	<b>13</b>		0.61	0.30	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Cobalt</b>	<b>9.9</b>		0.30	0.080	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Copper</b>	<b>20</b>		0.61	0.17	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Iron</b>	<b>16000</b>		12	6.3	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Lead</b>	<b>15</b>		0.30	0.14	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Magnesium</b>	<b>12000</b>	<b>B</b>	6.1	3.0	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Manganese</b>	<b>270</b>		0.61	0.088	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Nickel</b>	<b>23</b>		0.61	0.18	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Potassium</b>	<b>1200</b>		30	11	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
Selenium	<0.61		0.61	0.36	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Silver</b>	<b>0.40</b>		0.30	0.079	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Sodium</b>	<b>220</b>		61	9.0	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
Thallium	<0.61		0.61	0.30	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Vanadium</b>	<b>20</b>		0.30	0.072	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	1
<b>Zinc</b>	<b>49</b>		1.2	0.53	mg/Kg	✱	01/30/23 15:12	01/31/23 17:14	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		02/02/23 16:20	02/03/23 13:02	1
Iron	<0.40		0.40	0.20	mg/L		02/02/23 16:20	02/03/23 13:02	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/02/23 16:20	02/03/23 13:02	1
<b>Manganese</b>	<b>7.6</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 13:02	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228448-1

**Client Sample ID: 2852V-30-B01**

**Lab Sample ID: 500-228448-1**

Date Collected: 01/20/23 11:20

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 79.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.018	J	0.050	0.010	mg/L		02/02/23 16:21	02/03/23 17:02	1
Barium	0.42	J	0.50	0.050	mg/L		02/02/23 16:21	02/03/23 17:02	1
Beryllium	0.0047		0.0040	0.0040	mg/L		02/02/23 16:21	02/03/23 17:02	1
Boron	0.11		0.10	0.050	mg/L		02/02/23 16:21	02/03/23 17:02	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/02/23 16:21	02/03/23 17:02	1
Calcium	15		2.5	0.50	mg/L		02/02/23 16:21	02/03/23 17:02	1
Chromium	0.098		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 17:02	1
Cobalt	0.037		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 17:02	1
Iron	94		0.40	0.20	mg/L		02/02/23 16:21	02/03/23 17:02	1
Lead	0.062		0.0075	0.0075	mg/L		02/02/23 16:21	02/03/23 17:02	1
Manganese	0.66		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 17:02	1
Nickel	0.10		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 17:02	1
Potassium	15		2.5	0.50	mg/L		02/02/23 16:21	02/03/23 17:02	1
Selenium	<0.050		0.050	0.020	mg/L		02/02/23 16:21	02/03/23 17:02	1
Silver	<0.025		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 17:02	1
Zinc	0.25	J	0.50	0.020	mg/L		02/02/23 16:21	02/03/23 17:02	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		02/02/23 16:20	02/03/23 16:02	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		02/02/23 16:21	02/03/23 14:43	1
Thallium	0.0022		0.0020	0.0020	mg/L		02/02/23 16:21	02/03/23 14:43	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		02/02/23 15:15	02/03/23 10:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.018	0.0098	mg/Kg	☆	01/31/23 13:30	02/01/23 09:34	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.60		0.60	0.23	mg/Kg	☆	02/02/23 08:55	02/02/23 10:14	1
pH (SW846 9045D)	8.2		0.2	0.2	SU			01/25/23 19:56	1



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228448-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

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

### Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
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.

## Glossary

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

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228448-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	12-31-23



# 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		500-228448 COC	
Lab <del>TekLab, Inc.</del> <u>EuroPLS</u>		Project Name <u>AEB-007A</u>	
Address <del>5445 Horseshoe Lake Road</del> <u>Collinsville, IL 62234</u>		Project No <u>PTB/WO 195-002/07A</u>	
Phone <del>877-344-1003</del>		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	
Contact <del>Shelly Hennessy</del>		Sampler: <u>N. Coiro</u>	
email <del>shennessy@teklabinc.com</del>		COC No <u>1</u> of <u>1</u>	
		Lab Job No. <u>500-228448</u>	
		Sample Temp <u>5.4-4.5</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			

- 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	
<u>1</u>	<u>2852V-30-B01</u>	<u>1/20</u>	<u>1120</u>	<u>S</u>	<u>X</u>	<u>X</u>					<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>						
<u>2</u>	<u>Trn Blk/CHS</u>				<u>X</u>																

Relinquished by <u>[Signature]</u>	Date/Time <u>1/20/23 13:18</u>	Received by <u>[Signature]</u>	Date/Time <u>1/20/23 15:18</u>
Relinquished by <u>[Signature]</u>	Date/Time <u>1/20/23 16:11</u>	Received by <u>[Signature]</u>	Date/Time <u>1-20-23 16/11</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

<b>Client Information (Sub Contract Lab)</b>	Sampler: Wright, Richard	Lab PM: Wright, Richard	Carrier Tracking No(s):	COC No: 500-170004.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Richard.Wright@et.eurofinsus.com	State of Origin: Illinois	Page: Page 1 of 1

Company: Eurofins Environment Testing North Centr	Accreditations Required (See note): NELAP - Illinois	Job #: 500-228448-1
------------------------------------------------------	---------------------------------------------------------	------------------------

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: 2/2/2023 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 - AE8-007 Site:	PO #: WO #: Project #: 50021033 SSOW#:	<table border="1"> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>9012B/9012B_Prep Cyanide, Total</th> <th colspan="7"></th> <th>Total Number of containers</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> <td></td> </tr> </table>											Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B/9012B_Prep Cyanide, Total								Total Number of containers											
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B/9012B_Prep Cyanide, Total								Total Number of containers																								

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 Cyanide, Total								Total Number of containers	Special Instructions/Note:	
2852V-30-B01 (500-228448-1)	1/20/23	11:20 Central		Solid	X	X										1	E176

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> Unconfirmed	<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b> <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>Shirley Scott</i>	Date/Time: <i>1/23/23 0900</i>	Company:	Received by: <i>Ronelle Houston</i> Date/Time: <i>1-24-23 930</i> Company: <i>BETR</i>
Relinquished by:	Date/Time:	Company:	Received by:
Relinquished by:	Date/Time:	Company:	Received by:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
-------------------------------------	-------------------	---------------------------------------------

Page 33 of 35

2/6/2023





# 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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

9308 West 47th Street (northeast quadrant of 47th Street and Raymond Avenue)

City: Brookfield State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80547 Longitude: - 87.85383

(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.): 35

### 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 2852V-31-B01 WAS SAMPLED ADJACENT TO SITE 2852V-31. SEE TABLE 3t 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 REPORT - EUROFINS JOB ID NUMBER: 500-228439-1.

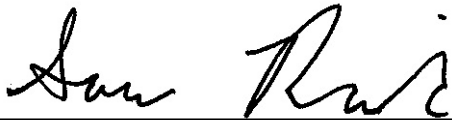
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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 5, 2023  
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 2852V-31**  
**Slager's on 47th**

Sample ID	2852V-31-B01-1	2852V-31-B01-1 DUP	Maximum Allowable Concentration				
Sample Depth (ft)	0-6	0-6					
Sample Date	1/20/2023	1/20/2023			<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	0	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area			
Sample pH	7.5	7.5					
Matrix	Soil	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 2/7/2023 9:46:02 AM

## JOB DESCRIPTION

IDOT - AE8-007

## JOB NUMBER

500-228439-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
2/7/2023 9:46:02 AM

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228439-1

**Client Sample ID: 2852V-31-B01-1**

**Lab Sample ID: 500-228439-1**

Date Collected: 01/20/23 10:40

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 80.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0020		0.0020	0.00067	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
1,2-Dichloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
<b>2-Butanone (MEK)</b>	<b>0.0097</b>		0.0050	0.0022	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
2-Hexanone	<0.0050		0.0050	0.0015	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
<b>Acetone</b>	<b>0.054</b>		0.020	0.0087	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
trans-1,3-Dichloropropene	<0.0020	*+	0.0020	0.00070	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☼	01/21/23 11:30	01/26/23 21:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 134	01/21/23 11:30	01/26/23 21:08	1
4-Bromofluorobenzene (Surr)	100		75 - 131	01/21/23 11:30	01/26/23 21:08	1
Dibromofluoromethane	101		75 - 126	01/21/23 11:30	01/26/23 21:08	1
Toluene-d8 (Surr)	110		75 - 124	01/21/23 11:30	01/26/23 21:08	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	☼	01/31/23 07:51	01/31/23 20:15	1
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	01/31/23 07:51	01/31/23 20:15	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	01/31/23 07:51	01/31/23 20:15	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	01/31/23 07:51	01/31/23 20:15	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	01/31/23 07:51	01/31/23 20:15	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228439-1

**Client Sample ID: 2852V-31-B01-1**

**Lab Sample ID: 500-228439-1**

**Date Collected: 01/20/23 10:40**

**Matrix: Solid**

**Date Received: 01/20/23 16:11**

**Percent Solids: 80.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
2-Chlorophenol	<0.20		0.20	0.070	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
4-Chlorophenyl phenyl ether	<0.20	*+	0.20	0.048	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Benzo[a]anthracene	<0.040		0.040	0.0055	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Benzo[a]pyrene	<0.040		0.040	0.0079	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Benzo[b]fluoranthene	<0.040		0.040	0.0088	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Carbazole	<0.20		0.20	0.10	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Chrysene	<0.040		0.040	0.011	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Dimethyl phthalate	<0.20	*+	0.20	0.053	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Fluoranthene	<0.040		0.040	0.0076	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Hexachlorobutadiene	<0.20	*+	0.20	0.064	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228439-1

**Client Sample ID: 2852V-31-B01-1**

**Lab Sample ID: 500-228439-1**

Date Collected: 01/20/23 10:40

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 80.3

**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	✳	01/31/23 07:51	01/31/23 20:15	1
Isophorone	<0.20		0.20	0.046	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Phenanthrene	<0.040		0.040	0.0057	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Phenol	<0.20		0.20	0.090	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Pyrene	<0.040		0.040	0.0081	mg/Kg	✳	01/31/23 07:51	01/31/23 20:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	117		31 - 143				01/31/23 07:51	01/31/23 20:15	1
2-Fluorobiphenyl	95		43 - 145				01/31/23 07:51	01/31/23 20:15	1
2-Fluorophenol	103		31 - 166				01/31/23 07:51	01/31/23 20:15	1
Nitrobenzene-d5 (Surr)	80		37 - 147				01/31/23 07:51	01/31/23 20:15	1
Phenol-d5	101		30 - 153				01/31/23 07:51	01/31/23 20:15	1
Terphenyl-d14 (Surr)	122		42 - 157				01/31/23 07:51	01/31/23 20:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.37	J	1.2	0.23	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Arsenic	11		0.60	0.20	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Barium	90		0.60	0.068	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Beryllium	0.88		0.24	0.056	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Boron	5.2		3.0	0.28	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Cadmium	0.22		0.12	0.021	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Calcium	8800	B	12	2.0	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Chromium	16		0.60	0.30	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Cobalt	15		0.30	0.078	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Copper	20		0.60	0.17	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Iron	21000		12	6.2	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Lead	18		0.30	0.14	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Magnesium	7300	B	6.0	3.0	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Manganese	450		0.60	0.087	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Nickel	26		0.60	0.17	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Potassium	1300		30	11	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Selenium	0.58	J	0.60	0.35	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Silver	0.49		0.30	0.077	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Sodium	780		60	8.8	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Thallium	<0.60		0.60	0.30	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Vanadium	23		0.30	0.070	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	1
Zinc	62		1.2	0.52	mg/Kg	✳	01/30/23 15:12	01/31/23 16:52	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		02/02/23 16:19	02/03/23 15:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/02/23 16:19	02/03/23 15:53	1
Chromium	<0.025		0.025	0.010	mg/L		02/02/23 16:19	02/03/23 15:53	1
Iron	<0.40		0.40	0.20	mg/L		02/02/23 16:19	02/03/23 15:53	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228439-1

**Client Sample ID: 2852V-31-B01-1**

**Lab Sample ID: 500-228439-1**

Date Collected: 01/20/23 10:40

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 80.3

**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		02/02/23 16:19	02/03/23 15:53	1
Manganese	14		0.025	0.010	mg/L		02/02/23 16:19	02/03/23 15:53	1
Nickel	0.019	J	0.025	0.010	mg/L		02/02/23 16:19	02/03/23 15:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.053		0.050	0.010	mg/L		02/02/23 16:20	02/03/23 16:21	1
Barium	0.75		0.50	0.050	mg/L		02/02/23 16:20	02/03/23 16:21	1
Beryllium	0.0086		0.0040	0.0040	mg/L		02/02/23 16:20	02/03/23 16:21	1
Boron	0.19		0.10	0.050	mg/L		02/02/23 16:20	02/03/23 16:21	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/02/23 16:20	02/03/23 16:21	1
Calcium	17		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 16:21	1
Chromium	0.16		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 16:21	1
Cobalt	0.072		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 16:21	1
Iron	160		0.40	0.20	mg/L		02/02/23 16:20	02/03/23 16:21	1
Lead	0.084		0.0075	0.0075	mg/L		02/02/23 16:20	02/03/23 16:21	1
Manganese	1.7		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 16:21	1
Nickel	0.17		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 16:21	1
Potassium	26		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 16:21	1
Selenium	<0.050		0.050	0.020	mg/L		02/02/23 16:20	02/03/23 16:21	1
Silver	<0.025	^+	0.025	0.010	mg/L		02/02/23 16:20	02/03/23 16:21	1
Zinc	0.42	J	0.50	0.020	mg/L		02/02/23 16:20	02/03/23 16:21	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		02/02/23 16:19	02/03/23 15:48	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		02/02/23 16:20	02/03/23 14:16	1
Thallium	0.0045		0.0020	0.0020	mg/L		02/02/23 16:20	02/03/23 14:16	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		02/02/23 15:15	02/03/23 11:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036		0.020	0.011	mg/Kg	✱	01/30/23 15:15	01/31/23 07:29	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.37	J	0.65	0.25	mg/Kg	✱	01/25/23 14:44	01/25/23 16:06	1
pH (SW846 9045D)	7.5		0.2	0.2	SU			01/25/23 19:37	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228439-1

**Client Sample ID: 2852V-31-B01-1 Dup**

**Lab Sample ID: 500-228439-2**

Date Collected: 01/20/23 11:00

Matrix: Solid

Date Received: 01/20/23 16:11

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	<0.0020		0.0020	0.00066	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00084	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
1,1-Dichloroethane	<0.0020		0.0020	0.00067	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
1,1-Dichloroethene	<0.0020		0.0020	0.00067	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
<b>2-Butanone (MEK)</b>	<b>0.0048</b>	<b>J</b>	0.0049	0.0022	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0015	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
<b>Acetone</b>	<b>0.033</b>		0.020	0.0085	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Bromoform	<0.0020		0.0020	0.00057	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Bromomethane	<0.0049		0.0049	0.0019	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Chlorobenzene	<0.0020		0.0020	0.00072	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Chloroethane	<0.0049		0.0049	0.0015	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Dibromochloromethane	<0.0020		0.0020	0.00064	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Styrene	<0.0020		0.0020	0.00059	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
trans-1,3-Dichloropropene	<0.0020	*+	0.0020	0.00069	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Trichloroethene	<0.0020		0.0020	0.00066	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	✳	01/21/23 11:30	01/26/23 21:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		70 - 134	01/21/23 11:30	01/26/23 21:30	1
4-Bromofluorobenzene (Surr)	108		75 - 131	01/21/23 11:30	01/26/23 21:30	1
Dibromofluoromethane	97		75 - 126	01/21/23 11:30	01/26/23 21:30	1
Toluene-d8 (Surr)	110		75 - 124	01/21/23 11:30	01/26/23 21:30	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	✳	01/31/23 07:51	01/31/23 19:51	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228439-1

**Client Sample ID: 2852V-31-B01-1 Dup**

**Lab Sample ID: 500-228439-2**

**Date Collected: 01/20/23 11:00**

**Matrix: Solid**

**Date Received: 01/20/23 16:11**

**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	<0.40		0.40	0.092	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
2,4-Dinitrophenol	<0.82		0.82	0.71	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
4-Chlorophenyl phenyl ether	<0.20	*+	0.20	0.047	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Benzo[a]anthracene	<0.040		0.040	0.0055	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Carbazole	<0.20		0.20	0.10	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Chrysene	<0.040		0.040	0.011	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Dimethyl phthalate	<0.20	*+	0.20	0.053	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
<b>Di-n-octyl phthalate</b>	<b>0.13</b>	<b>J</b>	0.20	0.066	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Hexachlorobutadiene	<0.20	*+	0.20	0.064	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	✳	01/31/23 07:51	01/31/23 19:51	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228439-1

**Client Sample ID: 2852V-31-B01-1 Dup**

**Lab Sample ID: 500-228439-2**

Date Collected: 01/20/23 11:00

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 81.8

**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	<0.040		0.040	0.011	mg/Kg	✱	01/31/23 07:51	01/31/23 19:51	1
Isophorone	<0.20		0.20	0.045	mg/Kg	✱	01/31/23 07:51	01/31/23 19:51	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	✱	01/31/23 07:51	01/31/23 19:51	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	✱	01/31/23 07:51	01/31/23 19:51	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	✱	01/31/23 07:51	01/31/23 19:51	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	✱	01/31/23 07:51	01/31/23 19:51	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	✱	01/31/23 07:51	01/31/23 19:51	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	✱	01/31/23 07:51	01/31/23 19:51	1
Phenol	<0.20		0.20	0.090	mg/Kg	✱	01/31/23 07:51	01/31/23 19:51	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	✱	01/31/23 07:51	01/31/23 19:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	115		31 - 143				01/31/23 07:51	01/31/23 19:51	1
2-Fluorobiphenyl	84		43 - 145				01/31/23 07:51	01/31/23 19:51	1
2-Fluorophenol	88		31 - 166				01/31/23 07:51	01/31/23 19:51	1
Nitrobenzene-d5 (Surr)	67		37 - 147				01/31/23 07:51	01/31/23 19:51	1
Phenol-d5	88		30 - 153				01/31/23 07:51	01/31/23 19:51	1
Terphenyl-d14 (Surr)	106		42 - 157				01/31/23 07:51	01/31/23 19:51	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	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Arsenic</b>	<b>7.3</b>		0.60	0.20	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Barium</b>	<b>52</b>		0.60	0.068	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Beryllium</b>	<b>0.75</b>		0.24	0.056	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Boron</b>	<b>6.2</b>		3.0	0.28	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Cadmium</b>	<b>0.14</b>		0.12	0.021	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Calcium</b>	<b>29000</b>	<b>B</b>	12	2.0	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Chromium</b>	<b>14</b>		0.60	0.30	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Cobalt</b>	<b>8.4</b>		0.30	0.078	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Copper</b>	<b>18</b>		0.60	0.17	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Iron</b>	<b>17000</b>		12	6.2	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Lead</b>	<b>14</b>		0.30	0.14	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Magnesium</b>	<b>21000</b>	<b>B</b>	6.0	3.0	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Manganese</b>	<b>190</b>		0.60	0.087	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Nickel</b>	<b>22</b>		0.60	0.17	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Potassium</b>	<b>1300</b>		30	11	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
Selenium	<0.60		0.60	0.35	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Silver</b>	<b>0.34</b>		0.30	0.077	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Sodium</b>	<b>700</b>		60	8.8	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Thallium</b>	<b>0.56</b>	<b>J</b>	0.60	0.30	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Vanadium</b>	<b>18</b>		0.30	0.070	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	1
<b>Zinc</b>	<b>59</b>		1.2	0.52	mg/Kg	✱	01/30/23 15:12	01/31/23 16:55	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		02/02/23 16:19	02/03/23 16:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/02/23 16:19	02/03/23 16:14	1
Chromium	<0.025		0.025	0.010	mg/L		02/02/23 16:19	02/03/23 16:14	1
Iron	<0.40		0.40	0.20	mg/L		02/02/23 16:19	02/03/23 16:14	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228439-1

**Client Sample ID: 2852V-31-B01-1 Dup**

**Lab Sample ID: 500-228439-2**

Date Collected: 01/20/23 11:00

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 81.8

**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		02/02/23 16:19	02/03/23 16:14	1
<b>Manganese</b>	<b>3.7</b>		0.025	0.010	mg/L		02/02/23 16:19	02/03/23 16:14	1
Nickel	<0.025		0.025	0.010	mg/L		02/02/23 16:19	02/03/23 16:14	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		02/02/23 16:20	02/03/23 16:24	1
<b>Barium</b>	<b>0.51</b>		0.50	0.050	mg/L		02/02/23 16:20	02/03/23 16:24	1
<b>Beryllium</b>	<b>0.0083</b>		0.0040	0.0040	mg/L		02/02/23 16:20	02/03/23 16:24	1
<b>Boron</b>	<b>0.19</b>		0.10	0.050	mg/L		02/02/23 16:20	02/03/23 16:24	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/02/23 16:20	02/03/23 16:24	1
<b>Calcium</b>	<b>15</b>		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 16:24	1
<b>Chromium</b>	<b>0.15</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 16:24	1
<b>Cobalt</b>	<b>0.059</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 16:24	1
<b>Iron</b>	<b>160</b>		0.40	0.20	mg/L		02/02/23 16:20	02/03/23 16:24	1
<b>Lead</b>	<b>0.094</b>		0.0075	0.0075	mg/L		02/02/23 16:20	02/03/23 16:24	1
<b>Manganese</b>	<b>0.99</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 16:24	1
<b>Nickel</b>	<b>0.16</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 16:24	1
<b>Potassium</b>	<b>27</b>		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 16:24	1
Selenium	<0.050		0.050	0.020	mg/L		02/02/23 16:20	02/03/23 16:24	1
Silver	<0.025	^+	0.025	0.010	mg/L		02/02/23 16:20	02/03/23 16:24	1
<b>Zinc</b>	<b>0.41</b>	<b>J</b>	0.50	0.020	mg/L		02/02/23 16:20	02/03/23 16:24	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		02/02/23 16:19	02/03/23 15:50	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		02/02/23 16:20	02/03/23 14:18	1
<b>Thallium</b>	<b>0.0051</b>		0.0020	0.0020	mg/L		02/02/23 16:20	02/03/23 14:18	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		02/02/23 15:15	02/03/23 11:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.039</b>		0.019	0.010	mg/Kg	✱	01/30/23 15:15	01/31/23 07:38	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.44</b>	<b>J</b>	0.61	0.23	mg/Kg	✱	01/25/23 14:45	01/25/23 16:08	1
<b>pH (SW846 9045D)</b>	<b>7.5</b>		0.2	0.2	SU			01/25/23 19:39	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228439-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

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

### Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

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

## Glossary

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

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228439-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	12-31-23





**CHAIN OF CUSTODY RECORD**

<p><b>Client Contact</b> 500-228439 COC</p> <p>Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com</p>	<p>Project Name <u>AES-007A</u></p> <p>Project No <u>PTB/WO 145-002/07A</u></p> <p>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</p> <p>Sampler: <u>N. Guv</u></p> <p>COC No <u>1</u> of <u>1</u></p> <p>Lab Job No. <u>500-228439</u></p> <p>Sample Temp. <u>5.4-4.5</u></p>
<p>Lab <del>TekLab, Inc.</del> <u>Envotus</u></p> <p>Address <del>5445 Horseshoe Lake Road Gallatinville, IL 62234</del></p> <p>Phone <del>877-344-1903</del></p> <p>Contact <del>Shelly Hennessy</del></p> <p>email <del>shennessy@teklabinc.com</del></p>	

**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
1	2852v-31-B01-1	1/20	1040	S	X	X					X	X	X	X	X		
2	2852v-31-B01-1 DUP	1/20	1100	S	X	X					X	X	X	X	X		B01-2 Not Sampled

Relinquished by <i>[Signature]</i>	Date/Time <u>1/20/23 13:15</u>	Received by <i>[Signature]</i>	Date/Time <u>1/20/23 15:18</u>
Relinquished by <i>[Signature]</i>	Date/Time <u>1/20/23 16:11</u>	Received by <i>[Signature]</i>	Date/Time <u>1-20-23 16:11</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

<b>Client Information (Sub Contract Lab)</b>		Sampler:		Lab PM: Wright, Richard		Carrier Tracking No(s):		COC No: 500-169998.1					
Client Contact: Shipping/Receiving		Phone:		E-Mail: Richard.Wright@et.eurofinsus.com		State of Origin: Illinois		Page: Page 1 of 1					
Company: Eurofins Environment Testing North Cent				Accreditations Required (See note): NELAP - Illinois				Job #: 500-228439-1					
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: 2/2/2023 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 - EDTA                    Y - Trizma Z - other (specify)			
Project Name: IDOT - AE8-007 Site:		PO #: WO #: Project #: 50021033 SSOW#:											
<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>Matrix (W=water, S=solid, O=soils/sed, BT=Tissue, A=Air)</b>		<b>Total Number of containers</b>		<b>E 176</b>  <b>Special Instructions/Note:</b>	
2852V-31-B01-1 (500-228439-1)		1/20/23		10:40 Central		Solid		X		1			
2852V-31-B01-1 Dup (500-228439-2)		1/20/23		11:00 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)				Primary Deliverable Rank: 1		Special Instructions/QC Requirements:							
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:							
Relinquished by: <i>Shin Scott</i>		Date/Time: <i>1/23/23 0900</i>		Company:		Received by: <i>Richard Wright</i>		Date/Time: <i>1-24-23 930</i>		Company: <i>ETNA</i>			
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:			
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:			
Custody Seals Intact: Δ Yes    Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:									

Page 38 of 40

2/7/2023





# 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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

9300 West 47th Street (northeast quadrant of 47th Street and Raymond Avenue)

City: Brookfield State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80546 Longitude: -87.85356  
(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: 0310330005 BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

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

Estimated Volume of debris (cu. Yd.): 35

### 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 2852V-32-B01 WAS SAMPLED ADJACENT TO SITE 2852V-32. SEE TABLE 3u 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 REPORT - EUROFINS JOB ID NUMBER: 500-228447-1.

**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 5, 2023  
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 2852V-32**  
**Ace Drain & Pastoral**  
**Care Services**

<b>Sample ID</b>	2852V-32-B01	<b>Maximum Allowable Concentration</b>				
<b>Sample Depth (ft)</b>	0-2					
<b>Sample Date</b>	1/20/2023	<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>	7.2					
<b>Matrix</b>	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 2/6/2023 3:15:53 PM

## JOB DESCRIPTION

IDOT - AE8-007

## JOB NUMBER

500-228447-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
2/6/2023 3:15:53 PM

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228447-1

**Client Sample ID: 2852V-32-B01**

**Lab Sample ID: 500-228447-1**

**Date Collected: 01/20/23 10:20**

**Matrix: Solid**

**Date Received: 01/20/23 16:11**

**Percent Solids: 79.6**

**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	✳	01/21/23 11:30	01/26/23 22:16	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00065	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Acetone	<0.018		0.018	0.0080	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
trans-1,3-Dichloropropene	<0.0018	*+	0.0018	0.00065	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	✳	01/21/23 11:30	01/26/23 22:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 134	01/21/23 11:30	01/26/23 22:16	1
4-Bromofluorobenzene (Surr)	110		75 - 131	01/21/23 11:30	01/26/23 22:16	1
Dibromofluoromethane	97		75 - 126	01/21/23 11:30	01/26/23 22:16	1
Toluene-d8 (Surr)	107		75 - 124	01/21/23 11:30	01/26/23 22:16	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	0.044	mg/Kg	✳	01/31/23 07:51	01/31/23 22:16	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	✳	01/31/23 07:51	01/31/23 22:16	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	✳	01/31/23 07:51	01/31/23 22:16	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	✳	01/31/23 07:51	01/31/23 22:16	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	✳	01/31/23 07:51	01/31/23 22:16	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228447-1

**Client Sample ID: 2852V-32-B01**

**Lab Sample ID: 500-228447-1**

**Date Collected: 01/20/23 10:20**

**Matrix: Solid**

**Date Received: 01/20/23 16:11**

**Percent Solids: 79.6**

**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	☼	01/31/23 07:51	01/31/23 22:16	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
2-Methylphenol	<0.21		0.21	0.065	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
2-Nitrophenol	<0.41		0.41	0.096	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
4-Chlorophenyl phenyl ether	<0.21	*+	0.21	0.048	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Dimethyl phthalate	<0.21	*+	0.21	0.053	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Hexachlorobutadiene	<0.21	*+	0.21	0.064	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	01/31/23 07:51	01/31/23 22:16	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228447-1

**Client Sample ID: 2852V-32-B01**

**Lab Sample ID: 500-228447-1**

Date Collected: 01/20/23 10:20

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 79.6

**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	<0.041		0.041	0.011	mg/Kg	✳	01/31/23 07:51	01/31/23 22:16	1
Isophorone	<0.21		0.21	0.046	mg/Kg	✳	01/31/23 07:51	01/31/23 22:16	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	✳	01/31/23 07:51	01/31/23 22:16	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	✳	01/31/23 07:51	01/31/23 22:16	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	✳	01/31/23 07:51	01/31/23 22:16	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	✳	01/31/23 07:51	01/31/23 22:16	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	✳	01/31/23 07:51	01/31/23 22:16	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	✳	01/31/23 07:51	01/31/23 22:16	1
Phenol	<0.21		0.21	0.091	mg/Kg	✳	01/31/23 07:51	01/31/23 22:16	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	✳	01/31/23 07:51	01/31/23 22:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	112		31 - 143				01/31/23 07:51	01/31/23 22:16	1
2-Fluorobiphenyl	88		43 - 145				01/31/23 07:51	01/31/23 22:16	1
2-Fluorophenol	90		31 - 166				01/31/23 07:51	01/31/23 22:16	1
Nitrobenzene-d5 (Surr)	65		37 - 147				01/31/23 07:51	01/31/23 22:16	1
Phenol-d5	86		30 - 153				01/31/23 07:51	01/31/23 22:16	1
Terphenyl-d14 (Surr)	115		42 - 157				01/31/23 07:51	01/31/23 22:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.42	J	1.2	0.24	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Arsenic	10		0.62	0.21	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Barium	100		0.62	0.071	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Beryllium	0.97		0.25	0.058	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Boron	6.7		3.1	0.29	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Cadmium	0.25		0.12	0.022	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Calcium	4200	B	12	2.1	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Chromium	17		0.62	0.31	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Cobalt	14		0.31	0.081	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Copper	21		0.62	0.17	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Iron	23000		12	6.4	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Lead	17		0.31	0.14	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Magnesium	4700	B	6.2	3.1	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Manganese	460		0.62	0.090	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Nickel	31		0.62	0.18	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Potassium	1400		31	11	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Selenium	0.70		0.62	0.36	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Silver	0.48		0.31	0.080	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Sodium	250		62	9.2	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Thallium	<0.62		0.62	0.31	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Vanadium	25		0.31	0.073	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	1
Zinc	66		1.2	0.54	mg/Kg	✳	01/30/23 15:12	01/31/23 17:11	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		02/02/23 16:20	02/03/23 12:59	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/02/23 16:20	02/03/23 12:59	1
Manganese	0.059		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 12:59	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228447-1

**Client Sample ID: 2852V-32-B01**

**Lab Sample ID: 500-228447-1**

Date Collected: 01/20/23 10:20

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 79.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		02/02/23 16:21	02/03/23 16:50	1
<b>Barium</b>	<b>0.22</b>	<b>J</b>	0.50	0.050	mg/L		02/02/23 16:21	02/03/23 16:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/02/23 16:21	02/03/23 16:50	1
<b>Boron</b>	<b>0.088</b>	<b>J</b>	0.10	0.050	mg/L		02/02/23 16:21	02/03/23 16:50	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/02/23 16:21	02/03/23 16:50	1
<b>Calcium</b>	<b>11</b>		2.5	0.50	mg/L		02/02/23 16:21	02/03/23 16:50	1
<b>Chromium</b>	<b>0.066</b>		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 16:50	1
<b>Cobalt</b>	<b>0.012</b>	<b>J</b>	0.025	0.010	mg/L		02/02/23 16:21	02/03/23 16:50	1
<b>Iron</b>	<b>46</b>		0.40	0.20	mg/L		02/02/23 16:21	02/03/23 16:50	1
<b>Lead</b>	<b>0.024</b>		0.0075	0.0075	mg/L		02/02/23 16:21	02/03/23 16:50	1
<b>Manganese</b>	<b>0.16</b>		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 16:50	1
<b>Nickel</b>	<b>0.051</b>		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 16:50	1
<b>Potassium</b>	<b>11</b>		2.5	0.50	mg/L		02/02/23 16:21	02/03/23 16:50	1
Selenium	<0.050		0.050	0.020	mg/L		02/02/23 16:21	02/03/23 16:50	1
Silver	<0.025		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 16:50	1
<b>Zinc</b>	<b>0.15</b>	<b>J</b>	0.50	0.020	mg/L		02/02/23 16:21	02/03/23 16:50	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		02/02/23 16:21	02/03/23 14:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		02/02/23 16:21	02/03/23 14:35	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		02/02/23 15:15	02/03/23 10:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.026</b>		0.019	0.0098	mg/Kg	⊛	01/30/23 15:15	01/31/23 07:52	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.33</b>	<b>J</b>	0.63	0.24	mg/Kg	⊛	02/02/23 08:55	02/02/23 10:12	1
<b>pH (SW846 9045D)</b>	<b>7.2</b>		0.2	0.2	SU			01/25/23 19:54	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228447-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

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

### Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

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

## Glossary

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

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228447-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	12-31-23





### CHAIN OF CUSTODY RECORD

500-228447 COC

<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				Project Name <u>AES-007A</u>		COC No <u>1</u> of <u>1</u>	
Lab <del>TekLab, Inc.</del> <u>EuroANS</u>				Project No <u>PTB/wu</u> <u>195-002/07A</u>		Lab Job No <u>500 -</u> <u>228447</u>	
Address <u>5445 Horseshoe Lake Road</u> <u>Collinsville, IL 62234</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		Sample Temp <u>5.4-4.5</u>	
Phone <u>877-344-1003</u>				Sampler: <u>N. Louis</u>			
Contact <u>Shelley Hennessy</u>							
email <u>shennessy@teklabinc.com</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	VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments
1	2852V-32-B01	1/20	1020	S	X	X					X	X	X	X	X		

Relinquished by <u>[Signature]</u>	Date/Time <u>1/20/23 15:18</u>	Received by <u>[Signature]</u>	Date/Time <u>1/20/23 1518</u>
Relinquished by <u>[Signature]</u>	Date/Time <u>1/20/23 1611</u>	Received by <u>[Signature]</u>	Date/Time <u>1-20-23 1611</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**



<b>Client Information (Sub Contract Lab)</b>				Sampler: Wright, Richard		Lab PM: Wright, Richard		Carrier Tracking No(s):		COC No: 500-170003.1			
Client Contact: Shipping/Receiving				Phone:		E-Mail: Richard.Wright@et.eurofinsus.com		State of Origin: Illinois		Page: Page 1 of 1			
Company: Eurofins Environment Testing North Centr						Accreditations Required (See note): NELAP - Illinois			Job #: 500-228447-1				
Address: 180 S. Van Buren Avenue, City: Barberton, State, Zip: OH, 44203				Due Date Requested: 2/2/2023		<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 - AE8-007				TAT Requested (days):									
Site:				PO #:									
Email:				WO #:									
Project #: 50021033				SSOW#:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers			
<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>Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)</b>			
2852V-32-B01 (500-228447-1)				1/20/23		10:20 Central		Solid		1			
Preservation Code:								X					

E176

Special Instructions/Note:

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)				Primary Deliverable Rank: 1			
Special Instructions/QC Requirements:							

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: <i>[Signature]</i>		Date/Time: 1/23/23 0900		Company:		Received by: <i>[Signature]</i>	
Relinquished by:		Date/Time:		Company:		Received by: 1-24-23 930	
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:
--------------------------------------------------------------------------------	-------------------	---------------------------------------------





# 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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

9220 West 47th Street (northwest corner of 47th Street and Arthur Avenue)

City: Brookfield State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80553 Longitude: -87.85221  
(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: 0310330006 BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

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

Estimated Volume of debris (cu. Yd.): 56

### 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 2852V-35-B01 WAS SAMPLED ADJACENT TO SITE 2852V-35. SEE TABLE 3x 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 REPORT - EUROFINS JOB ID NUMBER: 500-228442-1.

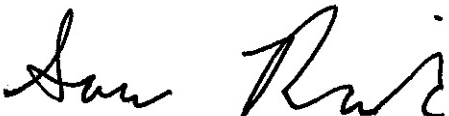
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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 5, 2023  
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 2852V-35**

**Joe's Saloon**

Sample ID	2852V-35-B01	Maximum Allowable Concentration					
Sample Depth (ft)	0-2						
Sample Date	1/20/2023						
PID	0						
Sample pH	8						
Matrix	Soil	<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	
Semivolatile Organic Compounds (mg/kg)							
Benzo(a)pyrene	0.3	1,2	0.09	0.09	0.98	11.4	2.1

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 2/7/2023 9:47:58 AM

## JOB DESCRIPTION

IDOT - AE8-007

## JOB NUMBER

500-228442-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
2/7/2023 9:47:58 AM

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228442-1

**Client Sample ID: 2852V-35-B01**

**Lab Sample ID: 500-228442-1**

Date Collected: 01/20/23 09:20

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 74.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0023		0.0023	0.00079	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
1,1,2,2-Tetrachloroethane	<0.0023		0.0023	0.00075	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
1,1,2-Trichloroethane	<0.0023		0.0023	0.0010	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
1,1-Dichloroethane	<0.0023		0.0023	0.00080	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
1,1-Dichloroethene	<0.0023		0.0023	0.00081	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
1,2-Dichloroethane	<0.0059		0.0059	0.0018	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
1,2-Dichloropropane	<0.0023		0.0023	0.00061	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
1,3-Dichloropropene, Total	<0.0023		0.0023	0.00082	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
2-Butanone (MEK)	<0.0059		0.0059	0.0026	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
2-Hexanone	<0.0059		0.0059	0.0018	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
4-Methyl-2-pentanone (MIBK)	<0.0059		0.0059	0.0017	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Acetone	<0.023	*+	0.023	0.010	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Benzene	<0.0023		0.0023	0.00060	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Bromodichloromethane	<0.0023		0.0023	0.00048	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Bromoform	<0.0023		0.0023	0.00068	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Bromomethane	<0.0059		0.0059	0.0022	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Carbon disulfide	<0.0059		0.0059	0.0012	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Carbon tetrachloride	<0.0023		0.0023	0.00068	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Chlorobenzene	<0.0023		0.0023	0.00087	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Chloroethane	<0.0059		0.0059	0.0017	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Chloroform	<0.0023		0.0023	0.00081	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Chloromethane	<0.0059		0.0059	0.0024	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
cis-1,2-Dichloroethene	<0.0023		0.0023	0.00066	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
cis-1,3-Dichloropropene	<0.0023		0.0023	0.00071	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Dibromochloromethane	<0.0023		0.0023	0.00077	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Ethylbenzene	<0.0023		0.0023	0.0011	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Methyl tert-butyl ether	<0.0023		0.0023	0.00069	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Methylene Chloride	<0.0059		0.0059	0.0023	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Styrene	<0.0023		0.0023	0.00071	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
<b>Tetrachloroethene</b>	<b>0.034</b>		0.0023	0.00080	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Toluene	<0.0023		0.0023	0.00059	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
trans-1,2-Dichloroethene	<0.0023		0.0023	0.0010	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
trans-1,3-Dichloropropene	<0.0023		0.0023	0.00082	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Trichloroethene	<0.0023		0.0023	0.00079	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Vinyl chloride	<0.0023		0.0023	0.0010	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1
Xylenes, Total	<0.0047		0.0047	0.00075	mg/Kg	✱	01/21/23 11:30	01/27/23 15:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 134	01/21/23 11:30	01/27/23 15:23	1
4-Bromofluorobenzene (Surr)	92		75 - 131	01/21/23 11:30	01/27/23 15:23	1
Dibromofluoromethane	109		75 - 126	01/21/23 11:30	01/27/23 15:23	1
Toluene-d8 (Surr)	91		75 - 124	01/21/23 11:30	01/27/23 15:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.22		0.22	0.048	mg/Kg	✱	01/31/23 07:51	01/31/23 20:39	1
1,2-Dichlorobenzene	<0.22		0.22	0.053	mg/Kg	✱	01/31/23 07:51	01/31/23 20:39	1
1,3-Dichlorobenzene	<0.22		0.22	0.050	mg/Kg	✱	01/31/23 07:51	01/31/23 20:39	1
1,4-Dichlorobenzene	<0.22		0.22	0.057	mg/Kg	✱	01/31/23 07:51	01/31/23 20:39	1
2,2'-oxybis[1-chloropropane]	<0.22		0.22	0.052	mg/Kg	✱	01/31/23 07:51	01/31/23 20:39	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228442-1

**Client Sample ID: 2852V-35-B01**

**Lab Sample ID: 500-228442-1**

Date Collected: 01/20/23 09:20

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 74.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.44		0.44	0.10	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
2,4,6-Trichlorophenol	<0.44		0.44	0.15	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
2,4-Dichlorophenol	<0.44		0.44	0.11	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
2,4-Dimethylphenol	<0.44		0.44	0.17	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
2,4-Dinitrophenol	<0.90		0.90	0.78	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
2,4-Dinitrotoluene	<0.22		0.22	0.071	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
2,6-Dinitrotoluene	<0.22		0.22	0.087	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
2-Chloronaphthalene	<0.22		0.22	0.049	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
2-Chlorophenol	<0.22		0.22	0.076	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
2-Methylnaphthalene	<0.090		0.090	0.0082	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
2-Methylphenol	<0.22		0.22	0.071	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
2-Nitroaniline	<0.22		0.22	0.060	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
2-Nitrophenol	<0.44		0.44	0.11	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
3 & 4 Methylphenol	<0.22		0.22	0.074	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.062	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
3-Nitroaniline	<0.44		0.44	0.14	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
4,6-Dinitro-2-methylphenol	<0.90		0.90	0.36	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
4-Bromophenyl phenyl ether	<0.22		0.22	0.059	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
4-Chloro-3-methylphenol	<0.44		0.44	0.15	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
4-Chloroaniline	<0.90		0.90	0.21	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
4-Chlorophenyl phenyl ether	<0.22	*+	0.22	0.052	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
4-Nitroaniline	<0.44		0.44	0.19	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
4-Nitrophenol	<0.90		0.90	0.42	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
Acenaphthene	<0.044		0.044	0.0080	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
<b>Acenaphthylene</b>	<b>0.027</b>	<b>J</b>	0.044	0.0059	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
<b>Anthracene</b>	<b>0.046</b>		0.044	0.0074	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
<b>Benzo[a]anthracene</b>	<b>0.25</b>		0.044	0.0060	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
<b>Benzo[a]pyrene</b>	<b>0.30</b>		0.044	0.0086	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
<b>Benzo[b]fluoranthene</b>	<b>0.32</b>		0.044	0.0096	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
<b>Benzo[g,h,i]perylene</b>	<b>0.097</b>		0.044	0.014	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
<b>Benzo[k]fluoranthene</b>	<b>0.12</b>		0.044	0.013	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
Bis(2-chloroethoxy)methane	<0.22		0.22	0.045	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
Bis(2-chloroethyl)ether	<0.22		0.22	0.067	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
Bis(2-ethylhexyl) phthalate	<0.22		0.22	0.081	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
Butyl benzyl phthalate	<0.22		0.22	0.085	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
Carbazole	<0.22		0.22	0.11	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
<b>Chrysene</b>	<b>0.26</b>		0.044	0.012	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
<b>Dibenz(a,h)anthracene</b>	<b>0.038</b>	<b>J</b>	0.044	0.0086	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
Dibenzofuran	<0.22		0.22	0.052	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
Diethyl phthalate	<0.22		0.22	0.075	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
Dimethyl phthalate	<0.22	*+	0.22	0.058	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
Di-n-butyl phthalate	<0.22		0.22	0.068	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
Di-n-octyl phthalate	<0.22		0.22	0.073	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
<b>Fluoranthene</b>	<b>0.44</b>		0.044	0.0083	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
<b>Fluorene</b>	<b>0.013</b>	<b>J</b>	0.044	0.0063	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
Hexachlorobenzene	<0.090		0.090	0.010	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
Hexachlorobutadiene	<0.22	*+	0.22	0.070	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
Hexachlorocyclopentadiene	<0.90		0.90	0.26	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1
Hexachloroethane	<0.22		0.22	0.068	mg/Kg	✳	01/31/23 07:51	01/31/23 20:39	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228442-1

**Client Sample ID: 2852V-35-B01**

**Lab Sample ID: 500-228442-1**

Date Collected: 01/20/23 09:20

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 74.4

**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>0.11</b>		0.044	0.012	mg/Kg	✱	01/31/23 07:51	01/31/23 20:39	1
Isophorone	<0.22		0.22	0.050	mg/Kg	✱	01/31/23 07:51	01/31/23 20:39	1
Naphthalene	<0.044		0.044	0.0068	mg/Kg	✱	01/31/23 07:51	01/31/23 20:39	1
Nitrobenzene	<0.044		0.044	0.011	mg/Kg	✱	01/31/23 07:51	01/31/23 20:39	1
N-Nitrosodi-n-propylamine	<0.090		0.090	0.054	mg/Kg	✱	01/31/23 07:51	01/31/23 20:39	1
N-Nitrosodiphenylamine	<0.22		0.22	0.053	mg/Kg	✱	01/31/23 07:51	01/31/23 20:39	1
Pentachlorophenol	<0.90		0.90	0.71	mg/Kg	✱	01/31/23 07:51	01/31/23 20:39	1
<b>Phenanthrene</b>	<b>0.17</b>		0.044	0.0062	mg/Kg	✱	01/31/23 07:51	01/31/23 20:39	1
Phenol	<0.22		0.22	0.099	mg/Kg	✱	01/31/23 07:51	01/31/23 20:39	1
<b>Pyrene</b>	<b>0.46</b>		0.044	0.0088	mg/Kg	✱	01/31/23 07:51	01/31/23 20:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	121		31 - 143				01/31/23 07:51	01/31/23 20:39	1
2-Fluorobiphenyl	92		43 - 145				01/31/23 07:51	01/31/23 20:39	1
2-Fluorophenol	105		31 - 166				01/31/23 07:51	01/31/23 20:39	1
Nitrobenzene-d5 (Surr)	76		37 - 147				01/31/23 07:51	01/31/23 20:39	1
Phenol-d5	97		30 - 153				01/31/23 07:51	01/31/23 20:39	1
Terphenyl-d14 (Surr)	121		42 - 157				01/31/23 07:51	01/31/23 20:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.31</b>	J	1.3	0.25	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Arsenic</b>	<b>6.1</b>		0.65	0.22	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Barium</b>	<b>83</b>		0.65	0.075	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Beryllium</b>	<b>0.90</b>		0.26	0.061	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Boron</b>	<b>7.0</b>		3.3	0.30	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Cadmium</b>	<b>0.26</b>		0.13	0.024	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Calcium</b>	<b>10000</b>	B	13	2.2	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Chromium</b>	<b>16</b>		0.65	0.32	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Cobalt</b>	<b>7.3</b>		0.33	0.086	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Copper</b>	<b>22</b>		0.65	0.18	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Iron</b>	<b>17000</b>		13	6.8	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Lead</b>	<b>17</b>		0.33	0.15	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Magnesium</b>	<b>6500</b>	B	6.5	3.2	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Manganese</b>	<b>110</b>		0.65	0.095	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Nickel</b>	<b>21</b>		0.65	0.19	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Potassium</b>	<b>1600</b>		33	12	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
Selenium	<0.65		0.65	0.38	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Silver</b>	<b>0.46</b>		0.33	0.084	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Sodium</b>	<b>450</b>		65	9.7	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Thallium</b>	<b>0.44</b>	J	0.65	0.33	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Vanadium</b>	<b>22</b>		0.33	0.077	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	1
<b>Zinc</b>	<b>59</b>		1.3	0.57	mg/Kg	✱	01/30/23 15:12	01/31/23 16:58	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		02/02/23 16:20	02/03/23 12:49	1
Chromium	<0.025		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 12:49	1
Iron	<0.40		0.40	0.20	mg/L		02/02/23 16:20	02/03/23 12:49	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/02/23 16:20	02/03/23 12:49	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228442-1

**Client Sample ID: 2852V-35-B01**

**Lab Sample ID: 500-228442-1**

Date Collected: 01/20/23 09:20

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 74.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.12		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 12:49	1
Nickel	<0.025		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 12:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.023	J	0.050	0.010	mg/L		02/02/23 16:21	02/03/23 16:34	1
Barium	0.80		0.50	0.050	mg/L		02/02/23 16:21	02/03/23 16:34	1
Beryllium	0.0077		0.0040	0.0040	mg/L		02/02/23 16:21	02/03/23 16:34	1
Boron	0.14		0.10	0.050	mg/L		02/02/23 16:21	02/03/23 16:34	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/02/23 16:21	02/03/23 16:34	1
Calcium	26		2.5	0.50	mg/L		02/02/23 16:21	02/03/23 16:34	1
Chromium	0.17		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 16:34	1
Cobalt	0.041		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 16:34	1
Iron	130		0.40	0.20	mg/L		02/02/23 16:21	02/03/23 16:34	1
Lead	0.085		0.0075	0.0075	mg/L		02/02/23 16:21	02/03/23 16:34	1
Manganese	0.51		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 16:34	1
Nickel	0.14		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 16:34	1
Potassium	23		2.5	0.50	mg/L		02/02/23 16:21	02/03/23 16:34	1
Selenium	<0.050		0.050	0.020	mg/L		02/02/23 16:21	02/03/23 16:34	1
Silver	<0.025	^+	0.025	0.010	mg/L		02/02/23 16:21	02/03/23 16:34	1
Zinc	0.49	J	0.50	0.020	mg/L		02/02/23 16:21	02/03/23 16:34	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		02/02/23 16:20	02/03/23 15:56	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		02/02/23 16:21	02/03/23 14:24	1
Thallium	0.0038		0.0020	0.0020	mg/L		02/02/23 16:21	02/03/23 14:24	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		02/02/23 15:15	02/03/23 10:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.051		0.021	0.011	mg/Kg	☆	01/30/23 15:15	01/31/23 07:44	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.41	J	0.67	0.26	mg/Kg	☆	01/25/23 14:46	01/25/23 16:09	1
pH (SW846 9045D)	8.0		0.2	0.2	SU			01/25/23 19:42	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228442-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

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

### Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

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

## Glossary

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



# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228442-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	12-31-23



**CHAIN OF CUSTODY RECORD**

500-228442 COC

<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		Lab <del>TekLab, Inc.</del> EuroFins Address <del>5445 Horseshoe Lake Road</del> Collinsville, IL 62234 Phone <del>877-344-1003</del> Contact <u>Shelly Hennessy</u> email <del>shennesoy@teklabinc.com</del>	Project Name <u>AES-007A</u> Project No <u>PTB/WO. 195-002/07A</u> TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD Other Sampler: <u>N. Cocio</u>	COC No <u>1</u> of <u>1</u> Lab Job No <u>500-228442</u> Sample Temp <u>5.4-4.5</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	VOCS	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments
1	2852V-35-B01	1/20	0920	S	X	X					X	X	X	X	X		

Relinquished by <u>[Signature]</u>	Date/Time <u>1/20/23 15:18</u>	Received by <u>[Signature]</u>	Date/Time <u>1/20/23 15:18</u>
Relinquished by <u>[Signature]</u>	Date/Time <u>1/20/23 16:11</u>	Received by <u>[Signature]</u>	Date/Time <u>1/20/23 16:11</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

<b>Client Information (Sub Contract Lab)</b>		Sampler:		Lab PM: Wright, Richard		Carrier Tracking No(s):		COC No: 500-169999.1			
Client Contact: Shipping/Receiving		Phone:		E-Mail: Richard.Wright@et.eurofinsus.com		State of Origin: Illinois		Page: Page 1 of 1			
Company: Eurofins Environment Testing North Centr				Accreditations Required (See note): NELAP - Illinois				Job #: 500-228442-1			
Address: 180 S. Van Buren Avenue,		Due Date Requested: 2/2/2023		<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)	
City: Barberton		TAT Requested (days):									
State, Zip: OH, 44203		PO #:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		9012B/9012B_Prep Cyanide, Total		Total Number of containers	
Phone: 330-497-9396(Tel) 330-497-0772(Fax)		WO #:									
Email:		Project #: 50021033		Special Instructions/Note:  <b>E176</b>		Preservation Code:		X		1	
Project Name: IDOT - AE8-007		SSOW#:									
Site:		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, S=solid, O=waste/oil, B=Tissue, A=Air)		Special Instructions/Note:	
<b>Sample Identification - Client ID (Lab ID)</b>		2852V-35-B01 (500-228442-1)		1/20/23		09:20 Central		Solid		E176	

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)		Primary Deliverable Rank: 1	
		Special Instructions/QC Requirements:	

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: <i>Shirley Scott</i>		Date/Time: 1/23/23 0900		Company:		Received by: <i>Richard Wright</i>	
Relinquished by:		Date/Time:		Company:		Date/Time: 1-24-23 930	
Relinquished by:		Date/Time:		Company:		Date/Time:	

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	
--------------------------------------------------------------------------------	--	-------------------	--	---------------------------------------------	--





# 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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

9216 We 47th Street (northeast corner of 47th Street and Arthur Avenue)

City: Brookfield State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80551 Longitude: -87.85174  
(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: 0310335017 BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

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

Estimated Volume of debris (cu. Yd.): 56

### 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 2852V-36-B01 WAS SAMPLED ADJACENT TO SITE 2852V-36. SEE TABLE 3y 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 REPORT - EUROFINS JOB ID NUMBER: 500-228443-1.

**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 5, 2023  
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 2852V-36  
Frisky Dog Grooming

Sample ID	2852V-36-B01-1	Maximum Allowable Concentration					
Sample Depth (ft)	0-4.5	<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	1/20/2023						
PID	0						
Sample pH	7.6						
Matrix	Soil						
Semivolatile Organic Compounds (mg/kg)							
Benzo(a)pyrene	0.4	1,2	0.09	0.09	0.98	11.4	2.1

 **ANALYTICAL REPORT****PREPARED FOR**

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

Generated 2/6/2023 3:28:54 PM

**JOB DESCRIPTION**

IDOT - AE8-007

**JOB NUMBER**

500-228443-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
2/6/2023 3:28:54 PM

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228443-1

**Client Sample ID: 2852V-36-B01-1**

**Lab Sample ID: 500-228443-1**

Date Collected: 01/20/23 09:00

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 81.7

**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	0.00066	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0015	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Acetone	<0.020	*+	0.020	0.0086	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Bromomethane	<0.0049		0.0049	0.0019	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Chloroethane	<0.0049		0.0049	0.0015	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Chloromethane	<0.0049		0.0049	0.0020	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	✱	01/21/23 11:30	01/27/23 15:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 134	01/21/23 11:30	01/27/23 15:47	1
4-Bromofluorobenzene (Surr)	85		75 - 131	01/21/23 11:30	01/27/23 15:47	1
Dibromofluoromethane	110		75 - 126	01/21/23 11:30	01/27/23 15:47	1
Toluene-d8 (Surr)	89		75 - 124	01/21/23 11:30	01/27/23 15:47	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	✱	01/31/23 07:51	01/31/23 21:03	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	✱	01/31/23 07:51	01/31/23 21:03	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	✱	01/31/23 07:51	01/31/23 21:03	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	✱	01/31/23 07:51	01/31/23 21:03	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	✱	01/31/23 07:51	01/31/23 21:03	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228443-1

**Client Sample ID: 2852V-36-B01-1**

**Lab Sample ID: 500-228443-1**

Date Collected: 01/20/23 09:00

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 81.7

**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	0.092	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
2-Methylnaphthalene	<0.081		0.081	0.0074	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
4,6-Dinitro-2-methylphenol	<0.81		0.81	0.32	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
4-Chlorophenyl phenyl ether	<0.20	*+	0.20	0.047	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
<b>Acenaphthene</b>	<b>0.014</b>	<b>J</b>	0.040	0.0072	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
<b>Acenaphthylene</b>	<b>0.0085</b>	<b>J</b>	0.040	0.0053	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
<b>Anthracene</b>	<b>0.043</b>		0.040	0.0067	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
<b>Benzo[a]anthracene</b>	<b>0.34</b>		0.040	0.0054	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
<b>Benzo[a]pyrene</b>	<b>0.40</b>		0.040	0.0078	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
<b>Benzo[b]fluoranthene</b>	<b>0.56</b>		0.040	0.0087	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
<b>Benzo[g,h,i]perylene</b>	<b>0.14</b>		0.040	0.013	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
<b>Benzo[k]fluoranthene</b>	<b>0.19</b>		0.040	0.012	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
Carbazole	<0.20		0.20	0.10	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
<b>Chrysene</b>	<b>0.40</b>		0.040	0.011	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
<b>Dibenz(a,h)anthracene</b>	<b>0.042</b>		0.040	0.0078	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
Dimethyl phthalate	<0.20	*+	0.20	0.052	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
<b>Fluoranthene</b>	<b>0.70</b>		0.040	0.0074	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
<b>Fluorene</b>	<b>0.013</b>	<b>J</b>	0.040	0.0056	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
Hexachlorobutadiene	<0.20	*+	0.20	0.063	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	✳	01/31/23 07:51	01/31/23 21:03	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228443-1

**Client Sample ID: 2852V-36-B01-1**

**Lab Sample ID: 500-228443-1**

Date Collected: 01/20/23 09:00

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 81.7

**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>0.16</b>		0.040	0.010	mg/Kg	✱	01/31/23 07:51	01/31/23 21:03	1
Isophorone	<0.20		0.20	0.045	mg/Kg	✱	01/31/23 07:51	01/31/23 21:03	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	✱	01/31/23 07:51	01/31/23 21:03	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	✱	01/31/23 07:51	01/31/23 21:03	1
N-Nitrosodi-n-propylamine	<0.081		0.081	0.049	mg/Kg	✱	01/31/23 07:51	01/31/23 21:03	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	✱	01/31/23 07:51	01/31/23 21:03	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	✱	01/31/23 07:51	01/31/23 21:03	1
<b>Phenanthrene</b>	<b>0.23</b>		0.040	0.0056	mg/Kg	✱	01/31/23 07:51	01/31/23 21:03	1
Phenol	<0.20		0.20	0.089	mg/Kg	✱	01/31/23 07:51	01/31/23 21:03	1
<b>Pyrene</b>	<b>0.53</b>		0.040	0.0080	mg/Kg	✱	01/31/23 07:51	01/31/23 21:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	119		31 - 143				01/31/23 07:51	01/31/23 21:03	1
2-Fluorobiphenyl	91		43 - 145				01/31/23 07:51	01/31/23 21:03	1
2-Fluorophenol	93		31 - 166				01/31/23 07:51	01/31/23 21:03	1
Nitrobenzene-d5 (Surr)	71		37 - 147				01/31/23 07:51	01/31/23 21:03	1
Phenol-d5	89		30 - 153				01/31/23 07:51	01/31/23 21:03	1
Terphenyl-d14 (Surr)	114		42 - 157				01/31/23 07:51	01/31/23 21:03	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	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Arsenic</b>	<b>5.4</b>		0.60	0.21	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Barium</b>	<b>57</b>		0.60	0.069	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Beryllium</b>	<b>0.73</b>		0.24	0.056	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Boron</b>	<b>6.4</b>		3.0	0.28	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Cadmium</b>	<b>0.28</b>		0.12	0.022	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Calcium</b>	<b>52000</b>	<b>B</b>	24	4.1	mg/Kg	✱	01/30/23 15:12	02/02/23 19:15	2
<b>Chromium</b>	<b>14</b>		0.60	0.30	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Cobalt</b>	<b>6.1</b>		0.30	0.079	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Copper</b>	<b>17</b>		0.60	0.17	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Iron</b>	<b>13000</b>		12	6.3	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Lead</b>	<b>33</b>		0.30	0.14	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Magnesium</b>	<b>27000</b>	<b>B</b>	6.0	3.0	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Manganese</b>	<b>130</b>		0.60	0.088	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Nickel</b>	<b>19</b>		0.60	0.18	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Potassium</b>	<b>1300</b>		30	11	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
Selenium	<0.60		0.60	0.36	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Silver</b>	<b>0.35</b>		0.30	0.078	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Sodium</b>	<b>390</b>		60	9.0	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Thallium</b>	<b>0.37</b>	<b>J</b>	0.60	0.30	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Vanadium</b>	<b>18</b>		0.30	0.071	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	1
<b>Zinc</b>	<b>58</b>		1.2	0.53	mg/Kg	✱	01/30/23 15:12	01/31/23 17:01	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		02/02/23 16:20	02/03/23 12:52	1
Chromium	<0.025		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 12:52	1
Iron	<0.40		0.40	0.20	mg/L		02/02/23 16:20	02/03/23 12:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/02/23 16:20	02/03/23 12:52	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228443-1

**Client Sample ID: 2852V-36-B01-1**

**Lab Sample ID: 500-228443-1**

Date Collected: 01/20/23 09:00

Matrix: Solid

Date Received: 01/20/23 16:11

Percent Solids: 81.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.17		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 12:52	1
Nickel	<0.025		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 12:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.020	J	0.050	0.010	mg/L		02/02/23 16:21	02/03/23 16:37	1
Barium	0.51		0.50	0.050	mg/L		02/02/23 16:21	02/03/23 16:37	1
Beryllium	0.0063		0.0040	0.0040	mg/L		02/02/23 16:21	02/03/23 16:37	1
Boron	0.13		0.10	0.050	mg/L		02/02/23 16:21	02/03/23 16:37	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/02/23 16:21	02/03/23 16:37	1
Calcium	18		2.5	0.50	mg/L		02/02/23 16:21	02/03/23 16:37	1
Chromium	0.13		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 16:37	1
Cobalt	0.027		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 16:37	1
Iron	98		0.40	0.20	mg/L		02/02/23 16:21	02/03/23 16:37	1
Lead	0.071		0.0075	0.0075	mg/L		02/02/23 16:21	02/03/23 16:37	1
Manganese	0.34		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 16:37	1
Nickel	0.11		0.025	0.010	mg/L		02/02/23 16:21	02/03/23 16:37	1
Potassium	20		2.5	0.50	mg/L		02/02/23 16:21	02/03/23 16:37	1
Selenium	<0.050		0.050	0.020	mg/L		02/02/23 16:21	02/03/23 16:37	1
Silver	<0.025	^+	0.025	0.010	mg/L		02/02/23 16:21	02/03/23 16:37	1
Zinc	0.31	J	0.50	0.020	mg/L		02/02/23 16:21	02/03/23 16:37	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		02/02/23 16:20	02/03/23 15:58	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		02/02/23 16:21	02/03/23 14:26	1
Thallium	0.0029		0.0020	0.0020	mg/L		02/02/23 16:21	02/03/23 14:26	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		02/02/23 15:15	02/03/23 10:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032		0.019	0.0099	mg/Kg	☆	01/30/23 15:15	01/31/23 07:46	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.37	J	0.64	0.24	mg/Kg	☆	01/25/23 14:47	01/25/23 16:28	1
pH (SW846 9045D)	7.6		0.2	0.2	SU			01/25/23 19:47	1



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228443-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

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

### Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

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

## Glossary

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

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228443-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	12-31-23



**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	500-228443 COC	Lab <del>TekLab, Inc.</del> Euro Air Address 5445 Horseshoe Lake Road Collinsville, IL 62234 Phone 877-344-4093 Contact Shelly Hennessy email shennessy@teklab.com	Project Name AES-007A Project No PTB/wo 195-002/C7A TAT <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD Other Sampler: N-coco	COC No 1 of 1 Lab Job No 500-228443 Sample Temp. 5.4-4.5
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------

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

					ANALYSES																
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization					
1	2852V-36-B01-1	1/20	0900	S	X	X					X	X	X	X	X						
	<del>2852V-36-B01-2</del>			<del>S</del>	<del>X</del>	<del>X</del>					<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>	<del>X</del>					Not Sampled	

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

Relinquished by <i>MA</i>	Date/Time 1/20/23 15:18	Received by <i>J. J. Elias</i>	Date/Time 1/20/23 15:18
Relinquished by <i>J. J. Elias</i>	Date/Time 1/20/23 16:11	Received by	Date/Time
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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

9110 West 47th Street (northeast quadrant of 47th Street and Maple Avenue)

City: Brookfield State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80558 Longitude: -87.84876  
(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.): 23

### 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 2852V-43-B01 WAS SAMPLED ADJACENT TO SITE 2852V-43. SEE TABLE 3ae 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: 500-228419-1.

**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 5, 2023  
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 2852V-43  
 Ultimate Fire Protection

Sample ID	2852V-43-B01	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	1/19/2023						
PID	0						
Sample pH	8						
Matrix	Soil						
Semivolatile Organic Compounds (mg/kg)							
Benzo(a)pyrene	0.19	1,2	0.09	0.09	0.98	11.4	2.1



# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 2/6/2023 3:12:33 PM

## JOB DESCRIPTION

IDOT - AE8-007

## JOB NUMBER

500-228419-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
2/6/2023 3:12:33 PM

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228419-1

**Client Sample ID: 2852V-43-B01**

**Lab Sample ID: 500-228419-1**

**Date Collected: 01/19/23 12:00**

**Matrix: Solid**

**Date Received: 01/20/23 12:01**

**Percent Solids: 77.4**

**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	0.00068	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00065	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00087	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
1,1-Dichloroethane	<0.0020		0.0020	0.00069	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
1,1-Dichloroethene	<0.0020		0.0020	0.00069	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
1,2-Dichloroethane	<0.0050		0.0050	0.0016	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
1,2-Dichloropropane	<0.0020		0.0020	0.00052	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00071	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Acetone	<0.020		0.020	0.0088	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Bromodichloromethane	<0.0020		0.0020	0.00041	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Bromoform	<0.0020		0.0020	0.00059	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Carbon disulfide	<0.0050		0.0050	0.0011	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Carbon tetrachloride	<0.0020		0.0020	0.00059	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Chlorobenzene	<0.0020		0.0020	0.00075	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Chloroform	<0.0020		0.0020	0.00070	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Chloromethane	<0.0050		0.0050	0.0020	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00061	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Dibromochloromethane	<0.0020		0.0020	0.00066	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Ethylbenzene	<0.0020		0.0020	0.00097	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00059	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Styrene	<0.0020		0.0020	0.00061	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
<b>Tetrachloroethene</b>	<b>0.0022</b>		0.0020	0.00069	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Toluene	<0.0020		0.0020	0.00051	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00089	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00071	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Trichloroethene	<0.0020		0.0020	0.00068	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Vinyl chloride	<0.0020		0.0020	0.00089	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1
Xylenes, Total	<0.0040		0.0040	0.00065	mg/Kg	✱	01/20/23 18:03	01/25/23 18:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 134	01/20/23 18:03	01/25/23 18:38	1
4-Bromofluorobenzene (Surr)	89		75 - 131	01/20/23 18:03	01/25/23 18:38	1
Dibromofluoromethane	115		75 - 126	01/20/23 18:03	01/25/23 18:38	1
Toluene-d8 (Surr)	88		75 - 124	01/20/23 18:03	01/25/23 18:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.42		0.42	0.090	mg/Kg	✱	01/30/23 13:36	02/03/23 10:34	2
1,2-Dichlorobenzene	<0.42		0.42	0.099	mg/Kg	✱	01/30/23 13:36	02/03/23 10:34	2
1,3-Dichlorobenzene	<0.42		0.42	0.094	mg/Kg	✱	01/30/23 13:36	02/03/23 10:34	2
1,4-Dichlorobenzene	<0.42		0.42	0.11	mg/Kg	✱	01/30/23 13:36	02/03/23 10:34	2
2,2'-oxybis[1-chloropropane]	<0.42		0.42	0.096	mg/Kg	✱	01/30/23 13:36	02/03/23 10:34	2

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228419-1

**Client Sample ID: 2852V-43-B01**

**Lab Sample ID: 500-228419-1**

**Date Collected: 01/19/23 12:00**

**Matrix: Solid**

**Date Received: 01/20/23 12:01**

**Percent Solids: 77.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.83		0.83	0.19	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
2,4,6-Trichlorophenol	<0.83		0.83	0.29	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
2,4-Dichlorophenol	<0.83		0.83	0.20	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
2,4-Dimethylphenol	<0.83		0.83	0.32	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
2,4-Dinitrophenol	<1.7		1.7	1.5	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
2,4-Dinitrotoluene	<0.42		0.42	0.13	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
2,6-Dinitrotoluene	<0.42		0.42	0.16	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
2-Chloronaphthalene	<0.42		0.42	0.092	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
2-Chlorophenol	<0.42		0.42	0.14	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
2-Methylnaphthalene	<0.17		0.17	0.015	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
2-Methylphenol	<0.42		0.42	0.13	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
2-Nitroaniline	<0.42		0.42	0.11	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
2-Nitrophenol	<0.83		0.83	0.20	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
3 & 4 Methylphenol	<0.42		0.42	0.14	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
3,3'-Dichlorobenzidine	<0.42		0.42	0.12	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
3-Nitroaniline	<0.83		0.83	0.26	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
4,6-Dinitro-2-methylphenol	<1.7		1.7	0.67	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
4-Bromophenyl phenyl ether	<0.42		0.42	0.11	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
4-Chloro-3-methylphenol	<0.83		0.83	0.28	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
4-Chloroaniline	<1.7		1.7	0.39	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
4-Chlorophenyl phenyl ether	<0.42		0.42	0.097	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
4-Nitroaniline	<0.83		0.83	0.35	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
4-Nitrophenol	<1.7		1.7	0.79	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Acenaphthene	<0.083		0.083	0.015	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
<b>Acenaphthylene</b>	<b>0.015</b>	<b>J</b>	0.083	0.011	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
<b>Anthracene</b>	<b>0.015</b>	<b>J</b>	0.083	0.014	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
<b>Benzo[a]anthracene</b>	<b>0.12</b>		0.083	0.011	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
<b>Benzo[a]pyrene</b>	<b>0.19</b>		0.083	0.016	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
<b>Benzo[b]fluoranthene</b>	<b>0.20</b>		0.083	0.018	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
<b>Benzo[g,h,i]perylene</b>	<b>0.086</b>		0.083	0.027	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
<b>Benzo[k]fluoranthene</b>	<b>0.081</b>	<b>J</b>	0.083	0.024	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Bis(2-chloroethoxy)methane	<0.42		0.42	0.085	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Bis(2-chloroethyl)ether	<0.42		0.42	0.12	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Bis(2-ethylhexyl) phthalate	<0.42		0.42	0.15	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Butyl benzyl phthalate	<0.42		0.42	0.16	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Carbazole	<0.42		0.42	0.21	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
<b>Chrysene</b>	<b>0.14</b>		0.083	0.023	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
<b>Dibenz(a,h)anthracene</b>	<b>0.026</b>	<b>J</b>	0.083	0.016	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Dibenzofuran	<0.42		0.42	0.097	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Diethyl phthalate	<0.42		0.42	0.14	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Dimethyl phthalate	<0.42		0.42	0.11	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Di-n-butyl phthalate	<0.42		0.42	0.13	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Di-n-octyl phthalate	<0.42		0.42	0.14	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
<b>Fluoranthene</b>	<b>0.19</b>		0.083	0.015	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Fluorene	<0.083		0.083	0.012	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Hexachlorobenzene	<0.17		0.17	0.019	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Hexachlorobutadiene	<0.42		0.42	0.13	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Hexachlorocyclopentadiene	<1.7		1.7	0.48	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2
Hexachloroethane	<0.42		0.42	0.13	mg/Kg	☆	01/30/23 13:36	02/03/23 10:34	2

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228419-1

**Client Sample ID: 2852V-43-B01**

**Lab Sample ID: 500-228419-1**

Date Collected: 01/19/23 12:00

Matrix: Solid

Date Received: 01/20/23 12:01

Percent Solids: 77.4

**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>0.089</b>		0.083	0.022	mg/Kg	✳	01/30/23 13:36	02/03/23 10:34	2
Isophorone	<0.42		0.42	0.093	mg/Kg	✳	01/30/23 13:36	02/03/23 10:34	2
Naphthalene	<0.083		0.083	0.013	mg/Kg	✳	01/30/23 13:36	02/03/23 10:34	2
Nitrobenzene	<0.083		0.083	0.021	mg/Kg	✳	01/30/23 13:36	02/03/23 10:34	2
N-Nitrosodi-n-propylamine	<0.17		0.17	0.10	mg/Kg	✳	01/30/23 13:36	02/03/23 10:34	2
N-Nitrosodiphenylamine	<0.42		0.42	0.098	mg/Kg	✳	01/30/23 13:36	02/03/23 10:34	2
Pentachlorophenol	<1.7		1.7	1.3	mg/Kg	✳	01/30/23 13:36	02/03/23 10:34	2
<b>Phenanthrene</b>	<b>0.074</b>	<b>J</b>	0.083	0.012	mg/Kg	✳	01/30/23 13:36	02/03/23 10:34	2
Phenol	<0.42		0.42	0.18	mg/Kg	✳	01/30/23 13:36	02/03/23 10:34	2
<b>Pyrene</b>	<b>0.18</b>		0.083	0.017	mg/Kg	✳	01/30/23 13:36	02/03/23 10:34	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	89		31 - 143				01/30/23 13:36	02/03/23 10:34	2
2-Fluorobiphenyl	82		43 - 145				01/30/23 13:36	02/03/23 10:34	2
2-Fluorophenol	115		31 - 166				01/30/23 13:36	02/03/23 10:34	2
Nitrobenzene-d5 (Surr)	73		37 - 147				01/30/23 13:36	02/03/23 10:34	2
Phenol-d5	89		30 - 153				01/30/23 13:36	02/03/23 10:34	2
Terphenyl-d14 (Surr)	92		42 - 157				01/30/23 13:36	02/03/23 10:34	2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.3		1.3	0.25	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Arsenic</b>	<b>7.1</b>		0.64	0.22	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Barium</b>	<b>67</b>		0.64	0.073	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Beryllium</b>	<b>0.62</b>		0.25	0.060	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Boron</b>	<b>7.1</b>		3.2	0.30	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Cadmium</b>	<b>0.47</b>		0.13	0.023	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Calcium</b>	<b>30000</b>	<b>B</b>	13	2.2	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Chromium</b>	<b>11</b>		0.64	0.32	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Cobalt</b>	<b>5.2</b>		0.32	0.083	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Copper</b>	<b>28</b>		0.64	0.18	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Iron</b>	<b>12000</b>		13	6.6	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Lead</b>	<b>31</b>		0.32	0.15	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Magnesium</b>	<b>18000</b>	<b>B</b>	6.4	3.2	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Manganese</b>	<b>190</b>		0.64	0.092	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Nickel</b>	<b>16</b>		0.64	0.19	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Potassium</b>	<b>1500</b>		32	11	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
Selenium	<0.64		0.64	0.37	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Silver</b>	<b>0.35</b>		0.32	0.082	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Sodium</b>	<b>540</b>		64	9.4	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
Thallium	<0.64		0.64	0.32	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Vanadium</b>	<b>16</b>		0.32	0.075	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1
<b>Zinc</b>	<b>81</b>		1.3	0.56	mg/Kg	✳	01/30/23 15:12	01/31/23 16:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Iron</b>	<b>0.26</b>	<b>J</b>	0.40	0.20	mg/L		02/02/23 16:19	02/03/23 14:37	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/02/23 16:19	02/03/23 14:37	1
<b>Manganese</b>	<b>0.080</b>		0.025	0.010	mg/L		02/02/23 16:19	02/03/23 14:37	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228419-1

**Client Sample ID: 2852V-43-B01**

**Lab Sample ID: 500-228419-1**

Date Collected: 01/19/23 12:00

Matrix: Solid

Date Received: 01/20/23 12:01

Percent Solids: 77.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		02/02/23 16:20	02/03/23 15:56	1
<b>Barium</b>	<b>0.34</b>	<b>J</b>	0.50	0.050	mg/L		02/02/23 16:20	02/03/23 15:56	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/02/23 16:20	02/03/23 15:56	1
<b>Boron</b>	<b>0.079</b>	<b>J</b>	0.10	0.050	mg/L		02/02/23 16:20	02/03/23 15:56	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/02/23 16:20	02/03/23 15:56	1
<b>Calcium</b>	<b>17</b>		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 15:56	1
<b>Chromium</b>	<b>0.069</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:56	1
<b>Cobalt</b>	<b>0.011</b>	<b>J</b>	0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:56	1
<b>Iron</b>	<b>61</b>		0.40	0.20	mg/L		02/02/23 16:20	02/03/23 15:56	1
<b>Lead</b>	<b>0.076</b>		0.0075	0.0075	mg/L		02/02/23 16:20	02/03/23 15:56	1
<b>Manganese</b>	<b>0.30</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:56	1
<b>Nickel</b>	<b>0.047</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:56	1
<b>Potassium</b>	<b>15</b>		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 15:56	1
Selenium	<0.050		0.050	0.020	mg/L		02/02/23 16:20	02/03/23 15:56	1
Silver	<0.025	^+	0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:56	1
<b>Zinc</b>	<b>0.35</b>	<b>J</b>	0.50	0.020	mg/L		02/02/23 16:20	02/03/23 15:56	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		02/02/23 16:20	02/03/23 14:00	1
Thallium	<0.0020		0.0020	0.0020	mg/L		02/02/23 16:20	02/03/23 14:00	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		02/02/23 15:15	02/03/23 11:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.057</b>		0.020	0.010	mg/Kg	⊛	01/30/23 15:15	01/31/23 10:08	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.37</b>	<b>J</b>	0.65	0.25	mg/Kg	⊛	01/25/23 14:37	01/25/23 15:52	1
<b>pH (SW846 9045D)</b>	<b>8.0</b>		0.2	0.2	SU			01/25/23 19:20	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228419-1

## Qualifiers

### 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
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

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

## Glossary

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

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228419-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	12-31-23



## Chain of Custody Record



<b>Client Information (Sub Contract Lab)</b>				Sampler:	Lab PM: Wright, Richard	Carrier Tracking No(s):	COC No: 500-169992.1					
Client Contact: Shipping/Receiving				Phone:	E-Mail: Richard.Wright@et.eurofinsus.com	State of Origin: Illinois	Page: Page 1 of 1					
Company: Eurofins Environment Testing North Centr				Accreditations Required (See note): NELAP - Illinois			Job #: 500-228419-1					
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: 2/2/2023 TAT Requested (days):	<b>Analysis Requested</b>				<b>Preservation Codes:</b> A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDTA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify) <b>Other:</b>				
Project Name: IDOT - AE8-007			PO #:									
Site:			WO #:									
Project #: 50021033			Field Filtered Sample (Yes or No)									
SSOW#:			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)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9012B/9012B_Prep Cyanide, Total	Total Number of containers	<b>E176</b>
Preservation Code:												
2852V-43-B01 (500-228419-1)				1/19/23	12:00 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)		Primary Deliverable Rank: 1	
Special Instructions/QC Requirements:			

Empty Kit Relinquished by:				Date:	Time:	Method of Shipment:	
Relinquished by:	Date/Time:	Company:	Relinquished by:	Date/Time:	Company:	Relinquished by:	Date/Time:
Relinquished by:	Date/Time:	Company:	Relinquished by:	Date/Time:	Company:	Relinquished by:	Date/Time:
Relinquished by:	Date/Time:	Company:	Relinquished by:	Date/Time:	Company:	Relinquished by:	Date/Time:
Custody Seals Intact: △ Yes △ No	Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks:			





# 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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

9016 West 47th Street (northeast corner of 47th Street and Plainfield Road)

City: Brookfield State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80569 Longitude: - 87.84733  
(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: 0311745015 BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

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

Estimated Volume of debris (cu. Yd.): 37

### 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 2852V-45-B01 WAS SAMPLED ADJACENT TO SITE 2852V-45. SEE TABLE 3ag 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: 500-228411-1.

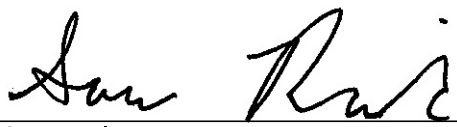
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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 5, 2023  
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 2852V-45  
Business Plaza**

Sample ID	2852V-45-B01-1	2852V-45-B01-1 DUP	2852V-45-B01-2	Maximum Allowable Concentration				
Sample Depth (ft)	0-7.5	0-7.5	7.5-13	<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	1/19/2023	1/19/2023	1/19/2023					
PID	0	0	0					
Sample pH	8.2	7.9	7.6					
Matrix	Soil	Soil	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 2/6/2023 12:46:30 PM

## JOB DESCRIPTION

IDOT - AE8-007

## JOB NUMBER

500-228411-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
2/6/2023 12:46:30 PM

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228411-1

**Client Sample ID: 2852V-45-B01-1**

**Lab Sample ID: 500-228411-1**

Date Collected: 01/19/23 11:20

Matrix: Solid

Date Received: 01/20/23 12:01

Percent Solids: 92.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0014		0.0014	0.00049	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
1,1,2,2-Tetrachloroethane	<0.0014		0.0014	0.00046	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
1,1,2-Trichloroethane	<0.0014		0.0014	0.00062	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
1,1-Dichloroethane	<0.0014		0.0014	0.00050	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
1,1-Dichloroethene	<0.0014		0.0014	0.00050	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
1,2-Dichloropropane	<0.0014		0.0014	0.00037	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
1,3-Dichloropropene, Total	<0.0014		0.0014	0.00051	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Acetone	<0.014		0.014	0.0063	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Benzene	<0.0014		0.0014	0.00037	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Bromodichloromethane	<0.0014		0.0014	0.00029	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Bromoform	<0.0014		0.0014	0.00042	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Carbon disulfide	<0.0036		0.0036	0.00075	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Carbon tetrachloride	<0.0014		0.0014	0.00042	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Chlorobenzene	<0.0014		0.0014	0.00053	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Chloroform	<0.0014		0.0014	0.00050	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Chloromethane	<0.0036		0.0036	0.0015	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
cis-1,2-Dichloroethene	<0.0014		0.0014	0.00041	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
cis-1,3-Dichloropropene	<0.0014		0.0014	0.00044	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Dibromochloromethane	<0.0014		0.0014	0.00047	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Ethylbenzene	<0.0014		0.0014	0.00069	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Methyl tert-butyl ether	<0.0014		0.0014	0.00043	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Styrene	<0.0014		0.0014	0.00044	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Tetrachloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Toluene	<0.0014		0.0014	0.00037	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
trans-1,2-Dichloroethene	<0.0014		0.0014	0.00064	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
trans-1,3-Dichloropropene	<0.0014		0.0014	0.00051	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Trichloroethene	<0.0014		0.0014	0.00049	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Vinyl chloride	<0.0014		0.0014	0.00064	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1
Xylenes, Total	<0.0029		0.0029	0.00046	mg/Kg	☼	01/20/23 18:03	01/25/23 17:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 134	01/20/23 18:03	01/25/23 17:25	1
4-Bromofluorobenzene (Surr)	86		75 - 131	01/20/23 18:03	01/25/23 17:25	1
Dibromofluoromethane	111		75 - 126	01/20/23 18:03	01/25/23 17:25	1
Toluene-d8 (Surr)	94		75 - 124	01/20/23 18:03	01/25/23 17:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228411-1

**Client Sample ID: 2852V-45-B01-1**

**Lab Sample ID: 500-228411-1**

**Date Collected: 01/19/23 11:20**

**Matrix: Solid**

**Date Received: 01/20/23 12:01**

**Percent Solids: 92.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.35		0.35	0.080	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
2,4-Dinitrophenol	<0.71		0.71	0.62	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
2,6-Dinitrotoluene	<0.18		0.18	0.069	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
2-Methylnaphthalene	<0.071		0.071	0.0065	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
2-Methylphenol	<0.18		0.18	0.056	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
2-Nitroaniline	<0.18		0.18	0.047	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
2-Nitrophenol	<0.35		0.35	0.083	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
3-Nitroaniline	<0.35		0.35	0.11	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.046	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
4-Chloro-3-methylphenol	<0.35		0.35	0.12	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
4-Chloroaniline	<0.71		0.71	0.17	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.041	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
4-Nitrophenol	<0.71		0.71	0.33	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Acenaphthene	<0.035		0.035	0.0063	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Anthracene	<0.035		0.035	0.0059	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Benzo[a]anthracene	<0.035		0.035	0.0047	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Benzo[a]pyrene	<0.035	*3	0.035	0.0068	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Benzo[b]fluoranthene	<0.035	*3	0.035	0.0076	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Benzo[g,h,i]perylene	<0.035	*3	0.035	0.011	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Benzo[k]fluoranthene	<0.035	*3	0.035	0.010	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.036	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.064	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Carbazole	<0.18		0.18	0.088	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Chrysene	<0.035		0.035	0.0096	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Dibenz(a,h)anthracene	<0.035	*3	0.035	0.0068	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Di-n-octyl phthalate	<0.18		0.18	0.057	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Fluoranthene	<0.035		0.035	0.0065	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Hexachlorobenzene	<0.071		0.071	0.0081	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Hexachlorobutadiene	<0.18		0.18	0.055	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Hexachlorocyclopentadiene	<0.71		0.71	0.20	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1
Hexachloroethane	<0.18		0.18	0.053	mg/Kg	☼	01/30/23 13:36	02/01/23 17:17	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228411-1

**Client Sample ID: 2852V-45-B01-1**

**Lab Sample ID: 500-228411-1**

**Date Collected: 01/19/23 11:20**

**Matrix: Solid**

**Date Received: 01/20/23 12:01**

**Percent Solids: 92.3**

**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	0.0091	mg/Kg	✳	01/30/23 13:36	02/01/23 17:17	1
Isophorone	<0.18		0.18	0.039	mg/Kg	✳	01/30/23 13:36	02/01/23 17:17	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	✳	01/30/23 13:36	02/01/23 17:17	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	✳	01/30/23 13:36	02/01/23 17:17	1
N-Nitrosodi-n-propylamine	<0.071		0.071	0.043	mg/Kg	✳	01/30/23 13:36	02/01/23 17:17	1
N-Nitrosodiphenylamine	<0.18		0.18	0.041	mg/Kg	✳	01/30/23 13:36	02/01/23 17:17	1
Pentachlorophenol	<0.71		0.71	0.56	mg/Kg	✳	01/30/23 13:36	02/01/23 17:17	1
Phenanthrene	<0.035		0.035	0.0049	mg/Kg	✳	01/30/23 13:36	02/01/23 17:17	1
Phenol	<0.18		0.18	0.078	mg/Kg	✳	01/30/23 13:36	02/01/23 17:17	1
Pyrene	<0.035		0.035	0.0070	mg/Kg	✳	01/30/23 13:36	02/01/23 17:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	18	S1-	31 - 143	01/30/23 13:36	02/01/23 17:17	1
2-Fluorobiphenyl	53		43 - 145	01/30/23 13:36	02/01/23 17:17	1
2-Fluorophenol	69		31 - 166	01/30/23 13:36	02/01/23 17:17	1
Nitrobenzene-d5 (Surr)	41		37 - 147	01/30/23 13:36	02/01/23 17:17	1
Phenol-d5	61		30 - 153	01/30/23 13:36	02/01/23 17:17	1
Terphenyl-d14 (Surr)	98		42 - 157	01/30/23 13:36	02/01/23 17:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0	F1	1.0	0.19	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
<b>Arsenic</b>	<b>4.1</b>		0.50	0.17	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
<b>Barium</b>	<b>6.9</b>		5.0	0.57	mg/Kg	✳	01/30/23 10:12	02/02/23 14:15	10
<b>Beryllium</b>	<b>0.19</b>	<b>J</b>	0.20	0.047	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
<b>Boron</b>	<b>7.2</b>		2.5	0.23	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
<b>Cadmium</b>	<b>0.15</b>		0.10	0.018	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
<b>Calcium</b>	<b>150000</b>	<b>B</b>	100	17	mg/Kg	✳	01/30/23 10:12	02/02/23 14:15	10
<b>Chromium</b>	<b>2.9</b>		0.50	0.25	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
<b>Cobalt</b>	<b>2.3</b>		0.25	0.066	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
<b>Copper</b>	<b>8.0</b>		0.50	0.14	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
<b>Iron</b>	<b>6900</b>		100	52	mg/Kg	✳	01/30/23 10:12	02/02/23 14:15	10
<b>Lead</b>	<b>4.5</b>		0.25	0.12	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
<b>Magnesium</b>	<b>90000</b>	<b>B</b>	50	25	mg/Kg	✳	01/30/23 10:12	02/02/23 14:15	10
<b>Manganese</b>	<b>150</b>		0.50	0.073	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
<b>Nickel</b>	<b>5.4</b>		0.50	0.15	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
<b>Potassium</b>	<b>480</b>	<b>F1</b>	25	8.9	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
Selenium	<0.50		0.50	0.29	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
Silver	<0.25		0.25	0.065	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
<b>Sodium</b>	<b>130</b>		50	7.4	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
Thallium	<0.50		0.50	0.25	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
<b>Vanadium</b>	<b>4.6</b>		0.25	0.059	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1
<b>Zinc</b>	<b>17</b>		1.0	0.44	mg/Kg	✳	01/30/23 10:12	01/31/23 18:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		02/02/23 16:20	02/03/23 15:02	1
Barium	<0.50		0.50	0.050	mg/L		02/02/23 16:20	02/03/23 15:02	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/02/23 16:20	02/03/23 15:02	1
Boron	<0.10		0.10	0.050	mg/L		02/02/23 16:20	02/03/23 15:02	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228411-1

**Client Sample ID: 2852V-45-B01-1**

**Lab Sample ID: 500-228411-1**

Date Collected: 01/19/23 11:20

Matrix: Solid

Date Received: 01/20/23 12:01

Percent Solids: 92.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/02/23 16:20	02/03/23 15:02	1
<b>Calcium</b>	<b>8.6</b>		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 15:02	1
Chromium	<0.025		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:02	1
Cobalt	<0.025		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:02	1
Iron	<0.40		0.40	0.20	mg/L		02/02/23 16:20	02/03/23 15:02	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/02/23 16:20	02/03/23 15:02	1
Manganese	<0.025		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:02	1
Nickel	<0.025		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:02	1
Potassium	<2.5		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 15:02	1
Selenium	<0.050		0.050	0.020	mg/L		02/02/23 16:20	02/03/23 15:02	1
Silver	<0.025	^+	0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:02	1
Zinc	<0.50		0.50	0.020	mg/L		02/02/23 16:20	02/03/23 15:02	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		02/02/23 16:20	02/03/23 13:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L		02/02/23 16:20	02/03/23 13:25	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		02/02/23 15:15	02/03/23 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<b>0.0094</b>	J	0.017	0.0088	mg/Kg	⊛	01/31/23 13:30	02/01/23 09:13	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.56		0.56	0.21	mg/Kg	⊛	01/25/23 13:21	01/25/23 14:46	1
<b>pH (SW846 9045D)</b>	<b>8.2</b>		0.2	0.2	SU			01/25/23 18:38	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228411-1

**Client Sample ID: 2852V-45-B01-2**

**Lab Sample ID: 500-228411-2**

Date Collected: 01/19/23 11:40

Matrix: Solid

Date Received: 01/20/23 12:01

Percent Solids: 94.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00054	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
1,2-Dichloroethane	<0.0040		0.0040	0.0013	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
2-Hexanone	<0.0040		0.0040	0.0013	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Acetone	<0.016		0.016	0.0071	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Carbon disulfide	<0.0040		0.0040	0.00084	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1
<b>Xylenes, Total</b>	<b>0.00060</b>	<b>J</b>	0.0032	0.00052	mg/Kg	✳	01/20/23 18:03	01/25/23 17:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		70 - 134	01/20/23 18:03	01/25/23 17:50	1
4-Bromofluorobenzene (Surr)	89		75 - 131	01/20/23 18:03	01/25/23 17:50	1
Dibromofluoromethane	109		75 - 126	01/20/23 18:03	01/25/23 17:50	1
Toluene-d8 (Surr)	89		75 - 124	01/20/23 18:03	01/25/23 17:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.25		0.25	0.053	mg/Kg	✳	01/30/23 13:36	02/01/23 17:39	1
1,2-Dichlorobenzene	<0.25		0.25	0.059	mg/Kg	✳	01/30/23 13:36	02/01/23 17:39	1
1,3-Dichlorobenzene	<0.25		0.25	0.055	mg/Kg	✳	01/30/23 13:36	02/01/23 17:39	1
1,4-Dichlorobenzene	<0.25		0.25	0.063	mg/Kg	✳	01/30/23 13:36	02/01/23 17:39	1
2,2'-oxybis[1-chloropropane]	<0.25		0.25	0.057	mg/Kg	✳	01/30/23 13:36	02/01/23 17:39	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228411-1

**Client Sample ID: 2852V-45-B01-2**

**Lab Sample ID: 500-228411-2**

Date Collected: 01/19/23 11:40

Matrix: Solid

Date Received: 01/20/23 12:01

Percent Solids: 94.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.49		0.49	0.11	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
2,4,6-Trichlorophenol	<0.49		0.49	0.17	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
2,4-Dichlorophenol	<0.49		0.49	0.12	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
2,4-Dimethylphenol	<0.49		0.49	0.19	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
2,4-Dinitrophenol	<0.99		0.99	0.87	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
2,4-Dinitrotoluene	<0.25		0.25	0.078	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
2,6-Dinitrotoluene	<0.25		0.25	0.097	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
2-Chloronaphthalene	<0.25		0.25	0.054	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
2-Chlorophenol	<0.25		0.25	0.084	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
2-Methylnaphthalene	<0.099		0.099	0.0091	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
2-Methylphenol	<0.25		0.25	0.079	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
2-Nitroaniline	<0.25		0.25	0.066	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
2-Nitrophenol	<0.49		0.49	0.12	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
3 & 4 Methylphenol	<0.25		0.25	0.082	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
3,3'-Dichlorobenzidine	<0.25		0.25	0.069	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
3-Nitroaniline	<0.49		0.49	0.15	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
4,6-Dinitro-2-methylphenol	<0.99		0.99	0.40	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
4-Bromophenyl phenyl ether	<0.25		0.25	0.065	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
4-Chloro-3-methylphenol	<0.49		0.49	0.17	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
4-Chloroaniline	<0.99		0.99	0.23	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
4-Chlorophenyl phenyl ether	<0.25		0.25	0.058	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
4-Nitroaniline	<0.49		0.49	0.21	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
4-Nitrophenol	<0.99		0.99	0.47	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Acenaphthene	<0.049		0.049	0.0089	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Acenaphthylene	<0.049		0.049	0.0065	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
<b>Anthracene</b>	<b>0.011</b>	<b>J</b>	0.049	0.0082	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
<b>Benzo[a]anthracene</b>	<b>0.028</b>	<b>J</b>	0.049	0.0066	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
<b>Benzo[a]pyrene</b>	<b>0.036</b>	<b>J *3</b>	0.049	0.0095	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
<b>Benzo[b]fluoranthene</b>	<b>0.047</b>	<b>J *3</b>	0.049	0.011	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Benzo[g,h,i]perylene	<0.049	*3	0.049	0.016	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
<b>Benzo[k]fluoranthene</b>	<b>0.016</b>	<b>J *3</b>	0.049	0.015	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Bis(2-chloroethoxy)methane	<0.25		0.25	0.050	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Bis(2-chloroethyl)ether	<0.25		0.25	0.074	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Bis(2-ethylhexyl) phthalate	<0.25		0.25	0.090	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Butyl benzyl phthalate	<0.25		0.25	0.094	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Carbazole	<0.25		0.25	0.12	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
<b>Chrysene</b>	<b>0.029</b>	<b>J</b>	0.049	0.013	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Dibenz(a,h)anthracene	<0.049	*3	0.049	0.0095	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Dibenzofuran	<0.25		0.25	0.058	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Diethyl phthalate	<0.25		0.25	0.084	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Dimethyl phthalate	<0.25		0.25	0.064	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Di-n-butyl phthalate	<0.25		0.25	0.075	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Di-n-octyl phthalate	<0.25		0.25	0.080	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
<b>Fluoranthene</b>	<b>0.052</b>		0.049	0.0091	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Fluorene	<0.049		0.049	0.0069	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Hexachlorobenzene	<0.099		0.099	0.011	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Hexachlorobutadiene	<0.25		0.25	0.077	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Hexachlorocyclopentadiene	<0.99		0.99	0.28	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Hexachloroethane	<0.25		0.25	0.075	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228411-1

**Client Sample ID: 2852V-45-B01-2**

**Lab Sample ID: 500-228411-2**

Date Collected: 01/19/23 11:40

Matrix: Solid

Date Received: 01/20/23 12:01

Percent Solids: 94.3

## 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	<0.049	*3	0.049	0.013	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Isophorone	<0.25		0.25	0.055	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Naphthalene	<0.049		0.049	0.0076	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Nitrobenzene	<0.049		0.049	0.012	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
N-Nitrosodi-n-propylamine	<0.099		0.099	0.060	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
N-Nitrosodiphenylamine	<0.25		0.25	0.058	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Pentachlorophenol	<0.99		0.99	0.79	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
<b>Phenanthrene</b>	<b>0.047</b>	<b>J</b>	0.049	0.0069	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Phenol	<0.25		0.25	0.11	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
<b>Pyrene</b>	<b>0.059</b>		0.049	0.0098	mg/Kg	✱	01/30/23 13:36	02/01/23 17:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	28	S1-	31 - 143				01/30/23 13:36	02/01/23 17:39	1
2-Fluorobiphenyl	64		43 - 145				01/30/23 13:36	02/01/23 17:39	1
2-Fluorophenol	85		31 - 166				01/30/23 13:36	02/01/23 17:39	1
Nitrobenzene-d5 (Surr)	51		37 - 147				01/30/23 13:36	02/01/23 17:39	1
Phenol-d5	71		30 - 153				01/30/23 13:36	02/01/23 17:39	1
Terphenyl-d14 (Surr)	118		42 - 157				01/30/23 13:36	02/01/23 17:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.20	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
<b>Arsenic</b>	<b>2.3</b>		0.51	0.17	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
<b>Barium</b>	<b>4.9</b>		2.5	0.29	mg/Kg	✱	01/30/23 10:12	02/02/23 14:51	5
<b>Beryllium</b>	<b>0.17</b>	<b>J</b>	0.20	0.047	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
<b>Boron</b>	<b>3.7</b>		2.5	0.24	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
<b>Cadmium</b>	<b>2.1</b>		0.10	0.018	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
<b>Calcium</b>	<b>69000</b>	<b>B</b>	51	8.6	mg/Kg	✱	01/30/23 10:12	02/02/23 14:51	5
<b>Chromium</b>	<b>3.6</b>		0.51	0.25	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
<b>Cobalt</b>	<b>1.9</b>		0.25	0.067	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
<b>Copper</b>	<b>5.3</b>		0.51	0.14	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
<b>Iron</b>	<b>5900</b>		51	26	mg/Kg	✱	01/30/23 10:12	02/02/23 14:51	5
<b>Lead</b>	<b>3.1</b>		0.25	0.12	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
<b>Magnesium</b>	<b>43000</b>	<b>B</b>	25	13	mg/Kg	✱	01/30/23 10:12	02/02/23 14:51	5
<b>Manganese</b>	<b>120</b>		0.51	0.074	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
<b>Nickel</b>	<b>4.3</b>		0.51	0.15	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
<b>Potassium</b>	<b>350</b>		25	9.0	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
Selenium	<0.51		0.51	0.30	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
<b>Silver</b>	<b>0.12</b>	<b>J</b>	0.25	0.066	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
<b>Sodium</b>	<b>100</b>		51	7.5	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
Thallium	<0.51		0.51	0.25	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
<b>Vanadium</b>	<b>8.6</b>		0.25	0.060	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1
<b>Zinc</b>	<b>220</b>		1.0	0.45	mg/Kg	✱	01/30/23 10:12	01/31/23 19:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		02/02/23 16:20	02/03/23 15:15	1
Barium	<0.50		0.50	0.050	mg/L		02/02/23 16:20	02/03/23 15:15	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/02/23 16:20	02/03/23 15:15	1
Boron	<0.10		0.10	0.050	mg/L		02/02/23 16:20	02/03/23 15:15	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228411-1

**Client Sample ID: 2852V-45-B01-2**

**Lab Sample ID: 500-228411-2**

Date Collected: 01/19/23 11:40

Matrix: Solid

Date Received: 01/20/23 12:01

Percent Solids: 94.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/02/23 16:20	02/03/23 15:15	1
<b>Calcium</b>	<b>7.3</b>		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 15:15	1
Chromium	<0.025		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:15	1
Cobalt	<0.025		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:15	1
<b>Iron</b>	<b>0.22</b>	<b>J</b>	0.40	0.20	mg/L		02/02/23 16:20	02/03/23 15:15	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/02/23 16:20	02/03/23 15:15	1
Manganese	<0.025		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:15	1
Nickel	<0.025		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:15	1
Potassium	<2.5		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 15:15	1
Selenium	<0.050		0.050	0.020	mg/L		02/02/23 16:20	02/03/23 15:15	1
Silver	<0.025	^+	0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:15	1
Zinc	<0.50		0.50	0.020	mg/L		02/02/23 16:20	02/03/23 15:15	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		02/02/23 16:20	02/03/23 13:33	1
Thallium	<0.0020		0.0020	0.0020	mg/L		02/02/23 16:20	02/03/23 13:33	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		02/02/23 15:15	02/03/23 11:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.017		0.017	0.0088	mg/Kg	⊛	01/31/23 13:30	02/01/23 09:15	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	⊛	01/25/23 13:22	01/25/23 14:48	1
<b>pH (SW846 9045D)</b>	<b>7.6</b>		0.2	0.2	SU			01/25/23 18:40	1



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228411-1

**Client Sample ID: 2852V-45-B01-1 Dup**

**Lab Sample ID: 500-228411-3**

**Date Collected: 01/19/23 11:30**

**Matrix: Solid**

**Date Received: 01/20/23 12:01**

**Percent Solids: 93.8**

**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	✱	01/20/23 18:03	01/25/23 18:14	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00051	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00069	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
1,1-Dichloroethane	<0.0016		0.0016	0.00055	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
1,1-Dichloroethene	<0.0016		0.0016	0.00055	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
1,2-Dichloroethane	<0.0040		0.0040	0.0012	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
1,2-Dichloropropane	<0.0016		0.0016	0.00041	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00056	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
2-Butanone (MEK)	<0.0040		0.0040	0.0018	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
2-Hexanone	<0.0040		0.0040	0.0012	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
4-Methyl-2-pentanone (MIBK)	<0.0040		0.0040	0.0012	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Acetone	<0.016		0.016	0.0070	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Bromoform	<0.0016		0.0016	0.00047	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Bromomethane	<0.0040		0.0040	0.0015	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Carbon disulfide	<0.0040		0.0040	0.00083	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Carbon tetrachloride	<0.0016		0.0016	0.00046	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Chlorobenzene	<0.0016		0.0016	0.00059	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Chloroethane	<0.0040		0.0040	0.0012	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Chloromethane	<0.0040		0.0040	0.0016	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00048	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Dibromochloromethane	<0.0016		0.0016	0.00052	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Ethylbenzene	<0.0016		0.0016	0.00077	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00047	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Methylene Chloride	<0.0040		0.0040	0.0016	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Styrene	<0.0016		0.0016	0.00048	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Tetrachloroethene	<0.0016		0.0016	0.00054	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Toluene	<0.0016		0.0016	0.00040	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00071	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00056	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Trichloroethene	<0.0016		0.0016	0.00054	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Vinyl chloride	<0.0016		0.0016	0.00071	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1
Xylenes, Total	<0.0032		0.0032	0.00051	mg/Kg	✱	01/20/23 18:03	01/25/23 18:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 134	01/20/23 18:03	01/25/23 18:14	1
4-Bromofluorobenzene (Surr)	85		75 - 131	01/20/23 18:03	01/25/23 18:14	1
Dibromofluoromethane	111		75 - 126	01/20/23 18:03	01/25/23 18:14	1
Toluene-d8 (Surr)	87		75 - 124	01/20/23 18:03	01/25/23 18:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.24		0.24	0.053	mg/Kg	✱	01/30/23 13:36	02/01/23 18:00	1
1,2-Dichlorobenzene	<0.24		0.24	0.058	mg/Kg	✱	01/30/23 13:36	02/01/23 18:00	1
1,3-Dichlorobenzene	<0.24		0.24	0.055	mg/Kg	✱	01/30/23 13:36	02/01/23 18:00	1
1,4-Dichlorobenzene	<0.24		0.24	0.062	mg/Kg	✱	01/30/23 13:36	02/01/23 18:00	1
2,2'-oxybis[1-chloropropane]	<0.24		0.24	0.056	mg/Kg	✱	01/30/23 13:36	02/01/23 18:00	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228411-1

**Client Sample ID: 2852V-45-B01-1 Dup**

**Lab Sample ID: 500-228411-3**

**Date Collected: 01/19/23 11:30**

**Matrix: Solid**

**Date Received: 01/20/23 12:01**

**Percent Solids: 93.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.48		0.48	0.11	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
2,4,6-Trichlorophenol	<0.48		0.48	0.17	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
2,4-Dichlorophenol	<0.48		0.48	0.12	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
2,4-Dimethylphenol	<0.48		0.48	0.18	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
2,4-Dinitrophenol	<0.98		0.98	0.86	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
2,4-Dinitrotoluene	<0.24		0.24	0.077	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
2,6-Dinitrotoluene	<0.24		0.24	0.096	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
2-Chloronaphthalene	<0.24		0.24	0.054	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
2-Chlorophenol	<0.24		0.24	0.083	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
2-Methylnaphthalene	<0.098		0.098	0.0090	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
2-Methylphenol	<0.24		0.24	0.078	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
2-Nitroaniline	<0.24		0.24	0.066	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
2-Nitrophenol	<0.48		0.48	0.12	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
3 & 4 Methylphenol	<0.24		0.24	0.081	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
3,3'-Dichlorobenzidine	<0.24		0.24	0.068	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
3-Nitroaniline	<0.48		0.48	0.15	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
4,6-Dinitro-2-methylphenol	<0.98		0.98	0.39	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
4-Bromophenyl phenyl ether	<0.24		0.24	0.064	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
4-Chloro-3-methylphenol	<0.48		0.48	0.17	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
4-Chloroaniline	<0.98		0.98	0.23	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
4-Chlorophenyl phenyl ether	<0.24		0.24	0.057	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
4-Nitroaniline	<0.48		0.48	0.20	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
4-Nitrophenol	<0.98		0.98	0.46	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Acenaphthene	<0.048		0.048	0.0088	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Acenaphthylene	<0.048		0.048	0.0064	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Anthracene	<0.048		0.048	0.0081	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Benzo[a]anthracene	<0.048		0.048	0.0066	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Benzo[a]pyrene	<0.048	*3	0.048	0.0094	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
<b>Benzo[b]fluoranthene</b>	<b>0.011</b>	<b>J *3</b>	0.048	0.011	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Benzo[g,h,i]perylene	<0.048	*3	0.048	0.016	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Benzo[k]fluoranthene	<0.048	*3	0.048	0.014	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Bis(2-chloroethoxy)methane	<0.24		0.24	0.050	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Bis(2-chloroethyl)ether	<0.24		0.24	0.073	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Bis(2-ethylhexyl) phthalate	<0.24		0.24	0.089	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Butyl benzyl phthalate	<0.24		0.24	0.093	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Carbazole	<0.24		0.24	0.12	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Chrysene	<0.048		0.048	0.013	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Dibenz(a,h)anthracene	<0.048	*3	0.048	0.0094	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Dibenzofuran	<0.24		0.24	0.057	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Diethyl phthalate	<0.24		0.24	0.083	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Dimethyl phthalate	<0.24		0.24	0.064	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Di-n-butyl phthalate	<0.24		0.24	0.074	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Di-n-octyl phthalate	<0.24		0.24	0.079	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Fluoranthene	<0.048		0.048	0.0090	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Fluorene	<0.048		0.048	0.0068	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Hexachlorobenzene	<0.098		0.098	0.011	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Hexachlorobutadiene	<0.24		0.24	0.077	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Hexachlorocyclopentadiene	<0.98		0.98	0.28	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1
Hexachloroethane	<0.24		0.24	0.074	mg/Kg	☆	01/30/23 13:36	02/01/23 18:00	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228411-1

**Client Sample ID: 2852V-45-B01-1 Dup**

**Lab Sample ID: 500-228411-3**

Date Collected: 01/19/23 11:30

Matrix: Solid

Date Received: 01/20/23 12:01

Percent Solids: 93.8

**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	<0.048	*3	0.048	0.013	mg/Kg	☼	01/30/23 13:36	02/01/23 18:00	1
Isophorone	<0.24		0.24	0.055	mg/Kg	☼	01/30/23 13:36	02/01/23 18:00	1
Naphthalene	<0.048		0.048	0.0075	mg/Kg	☼	01/30/23 13:36	02/01/23 18:00	1
Nitrobenzene	<0.048		0.048	0.012	mg/Kg	☼	01/30/23 13:36	02/01/23 18:00	1
N-Nitrosodi-n-propylamine	<0.098		0.098	0.060	mg/Kg	☼	01/30/23 13:36	02/01/23 18:00	1
N-Nitrosodiphenylamine	<0.24		0.24	0.057	mg/Kg	☼	01/30/23 13:36	02/01/23 18:00	1
Pentachlorophenol	<0.98		0.98	0.78	mg/Kg	☼	01/30/23 13:36	02/01/23 18:00	1
Phenanthrene	<0.048		0.048	0.0068	mg/Kg	☼	01/30/23 13:36	02/01/23 18:00	1
Phenol	<0.24		0.24	0.11	mg/Kg	☼	01/30/23 13:36	02/01/23 18:00	1
Pyrene	<0.048		0.048	0.0097	mg/Kg	☼	01/30/23 13:36	02/01/23 18:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	34		31 - 143				01/30/23 13:36	02/01/23 18:00	1
2-Fluorobiphenyl	71		43 - 145				01/30/23 13:36	02/01/23 18:00	1
2-Fluorophenol	86		31 - 166				01/30/23 13:36	02/01/23 18:00	1
Nitrobenzene-d5 (Surr)	56		37 - 147				01/30/23 13:36	02/01/23 18:00	1
Phenol-d5	69		30 - 153				01/30/23 13:36	02/01/23 18:00	1
Terphenyl-d14 (Surr)	121		42 - 157				01/30/23 13:36	02/01/23 18:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.99		0.99	0.19	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
<b>Arsenic</b>	<b>3.2</b>		0.50	0.17	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
<b>Barium</b>	<b>10</b>		2.5	0.28	mg/Kg	☼	01/30/23 10:12	02/02/23 14:54	5
<b>Beryllium</b>	<b>0.23</b>		0.20	0.046	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
<b>Boron</b>	<b>4.4</b>		2.5	0.23	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
<b>Cadmium</b>	<b>0.13</b>		0.099	0.018	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
<b>Calcium</b>	<b>63000</b>	<b>B</b>	50	8.4	mg/Kg	☼	01/30/23 10:12	02/02/23 14:54	5
<b>Chromium</b>	<b>4.8</b>		0.50	0.25	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
<b>Cobalt</b>	<b>3.2</b>		0.25	0.065	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
<b>Copper</b>	<b>8.0</b>		0.50	0.14	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
<b>Iron</b>	<b>8500</b>		50	26	mg/Kg	☼	01/30/23 10:12	02/02/23 14:54	5
<b>Lead</b>	<b>5.6</b>		0.25	0.11	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
<b>Magnesium</b>	<b>39000</b>	<b>B</b>	25	12	mg/Kg	☼	01/30/23 10:12	02/02/23 14:54	5
<b>Manganese</b>	<b>140</b>		0.50	0.072	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
<b>Nickel</b>	<b>6.9</b>		0.50	0.14	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
<b>Potassium</b>	<b>620</b>		25	8.8	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
Selenium	<0.50		0.50	0.29	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
<b>Silver</b>	<b>0.11</b>	<b>J</b>	0.25	0.064	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
<b>Sodium</b>	<b>110</b>		50	7.4	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
Thallium	<0.50		0.50	0.25	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
<b>Vanadium</b>	<b>8.9</b>		0.25	0.059	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	1
<b>Zinc</b>	<b>25</b>		0.99	0.44	mg/Kg	☼	01/30/23 10:12	01/31/23 19:10	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		02/02/23 16:19	02/03/23 13:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/02/23 16:19	02/03/23 13:41	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228411-1

**Client Sample ID: 2852V-45-B01-1 Dup**

**Lab Sample ID: 500-228411-3**

Date Collected: 01/19/23 11:30

Matrix: Solid

Date Received: 01/20/23 12:01

Percent Solids: 93.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		02/02/23 16:20	02/03/23 15:18	1
Barium	<0.50		0.50	0.050	mg/L		02/02/23 16:20	02/03/23 15:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/02/23 16:20	02/03/23 15:18	1
Boron	<0.10		0.10	0.050	mg/L		02/02/23 16:20	02/03/23 15:18	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/02/23 16:20	02/03/23 15:18	1
<b>Calcium</b>	<b>8.2</b>		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 15:18	1
<b>Chromium</b>	<b>0.017</b>	<b>J</b>	0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:18	1
Cobalt	<0.025		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:18	1
<b>Iron</b>	<b>16</b>		0.40	0.20	mg/L		02/02/23 16:20	02/03/23 15:18	1
<b>Lead</b>	<b>0.0099</b>		0.0075	0.0075	mg/L		02/02/23 16:20	02/03/23 15:18	1
<b>Manganese</b>	<b>0.061</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:18	1
<b>Nickel</b>	<b>0.014</b>	<b>J</b>	0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:18	1
<b>Potassium</b>	<b>4.2</b>		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 15:18	1
Selenium	<0.050		0.050	0.020	mg/L		02/02/23 16:20	02/03/23 15:18	1
Silver	<0.025	^+	0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:18	1
<b>Zinc</b>	<b>0.055</b>	<b>J</b>	0.50	0.020	mg/L		02/02/23 16:20	02/03/23 15:18	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		02/02/23 16:20	02/03/23 13:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		02/02/23 16:20	02/03/23 13:35	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		02/02/23 15:15	02/03/23 11:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.013</b>	<b>J</b>	0.016	0.0086	mg/Kg	⊛	01/31/23 13:30	02/01/23 09:17	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.53		0.53	0.20	mg/Kg	⊛	01/25/23 13:23	01/25/23 14:49	1
<b>pH (SW846 9045D)</b>	<b>7.9</b>		0.2	0.2	SU			01/25/23 18:43	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228411-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

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

### Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F3	Duplicate RPD exceeds the control limit
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

## Glossary

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

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228411-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	12-31-23



# CHAIN OF CUSTODY RECORD

500-228411 COC

<b>Client Contact</b>		<b>Project Name</b> <u>AEB-007A</u>	
Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com		COC No <u>1</u> of <u>1</u>	
Lab <del>TekLab, Inc.</del> <u>EuroFINS</u>		Project No <u>PTB/WO. 145-002/07A</u>	
Address <u>5445 Horseshoe Lake Road</u> <u>Collinsville, IL 62234</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	
Phone <u>877-344-1003</u>		Lab Job No <u>500 -</u>	
Contact <u>Shelly Hennessy</u>		Sample Temp <u>228411</u>	
email <u>shennessy@teklabinc.com</u>		Sampler: <u>N. Coiu</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	2852V-45-B01-1	1/19	1120	S	X	X						X	X	X	X	X		
2	2852V-45-B01-2	1/19	1140	S	X	X						X	X	X	X	X		
3	2852V-45-B01-1 DVP	1/19	1130	S	X	X						X	X	X	X	X		

Relinquished by <u>Ann Cain</u>	Date/Time <u>1/20/23 11:10</u>	Received by <u>N. Coiu</u>	Date/Time <u>1/20/23 11:10</u>
Relinquished by <u>N. Coiu</u>	Date/Time <u>1/20/23 12:01</u>	Received by <u>[Signature]</u>	Date/Time <u>1/20/23 12:01</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

2.7/2.5

**Chain of Custody Record**



<b>Client Information (Sub Contract Lab)</b>		Sampler:		Lab PM: Wright, Richard		Carrier Tracking No(s):		COC No: 500-169989.1				
Client Contact: Shipping/Receiving		Phone:		E-Mail: Richard.Wright@et.eurofinsus.com		State of Origin: Illinois		Page: Page 1 of 1				
Company: Eurofins Environment Testing North Centr				Accreditations Required (See note): NELAP - Illinois				Job #: 500-228411-1				
Address: 180 S. Van Buren Avenue,		Due Date Requested: 2/2/2023		<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: Barberton		TAT Requested (days):										
State, Zip: OH, 44203		PO #:										
Phone: 330-497-9396(Tel) 330-497-0772(Fax)		WO #:										
Email:		Project #: 50021033										
Project Name: IDOT - AE8-007		SSOW#:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of containers				
Site:				9012B/9012B_Prep Cyanide, Total								
<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>Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)</b>					<b>E176</b>		
											<b>Special Instructions/Note:</b>	
2852V-45-B01-1 (500-228411-1)		1/19/23	11:20 Central		Solid		X					
2852V-45-B01-2 (500-228411-2)		1/19/23	11:40 Central		Solid		X					
2852V-45-B01-1 Dup (500-228411-3)		1/19/23	11:30 Central		Solid		X					

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>Shirley Scott</i>		Date/Time: 1/23/23 0900		Company:		Received by: <i>Rachelle Nance</i>	
Relinquished by:		Date/Time:		Company:		Date/Time: 1:24:23 930	
Relinquished by:		Date/Time:		Company:		Received by:	
Relinquished by:		Date/Time:		Company:		Date/Time:	

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	
--------------------------------------------------------------------------------	--	-------------------	--	---------------------------------------------	--

Page 47 of 49

2/6/2023







# 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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

9600 West 47th Street (southeast corner of 47th Street and East Avenue)

City: McCook State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80524 Longitude: -87.85729  
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

Additional BOL: 0311745048

IEPA Site Number(s), if assigned: BOL: 0311745021 BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

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

Estimated Volume of debris (cu. Yd.): 11,580

### 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 2852V-46-B04, 2852V-46-B05, 2852V-46-B06, 2852V-46-B10, 2852V-46-B11, 2852V-46-B12, 2852V-46-B14 AND 2852V-46-B15 WERE SAMPLED ADJACENT TO SITE 2852V-46. SEE TABLE 3ah AND FIGURES 5 THROUGH 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: 500-228249-1.

**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 5, 2023  
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 2852V-46  
Multiple Businesses

Sample ID	2852V-46-B04-1	2852V-46-B05	2852V-46-B06-1	2852V-46-B10-1	2852V-46-B11	Maximum Allowable Concentration					
Sample Depth (ft)	0-6	0-4	0-5.5	0-4	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	1/17/2023	1/17/2023	1/17/2023	1/17/2023	1/17/2023						
PID	0	0	0	0	0						
Sample pH	8.2	8.7	8.7	7.8	7.7						
Matrix	Soil	Soil	Soil	Soil	Soil						
<b>Semivolatile Organic Compounds (mg/kg)</b>											
Benzo(a)pyrene	0.47	1.2	ND	ND	ND	0.09	0.09	0.98	11.4	2.1	
<b>Inorganic Compounds, Total (mg/kg)</b>											
Arsenic	12	1.3	8.3	8.9	10	6.6	11.3	--	11.3	--	13

Sample ID	2852V-46-B11 DUP	2852V-46-B12-1	2852V-46-B14-1	2852V-46-B15-1	Maximum Allowable Concentration					
Sample Depth (ft)	0-5	0-3	0-4	0-3	<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	1/17/2023	1/17/2023	1/17/2023	1/17/2023						
PID	0	0	0	0						
Sample pH	7.9	8.4	8.1	9						
Matrix	Soil	Soil	Soil	Soil						
<b>Semivolatile Organic Compounds (mg/kg)</b>										
Benzo(a)pyrene	ND	ND	ND	J 0.033	0.09	0.09	0.98	11.4	2.1	
<b>Inorganic Compounds, Total (mg/kg)</b>										
Arsenic	10	11	6.2	4.4	11.3	--	11.3	--	13	



# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 2/3/2023 2:38:54 PM

## JOB DESCRIPTION

IDOT - AE8-007

## JOB NUMBER

500-228249-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
2/3/2023 2:38:54 PM

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B04-1**

**Lab Sample ID: 500-228249-2**

**Date Collected: 01/17/23 09:20**

**Matrix: Solid**

**Date Received: 01/18/23 11:25**

**Percent Solids: 79.5**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0019		0.0019	0.00065	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00062	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00083	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
1,1-Dichloroethane	<0.0019		0.0019	0.00066	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00068	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Acetone	<0.019		0.019	0.0084	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Carbon disulfide	<0.0048		0.0048	0.0010	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Carbon tetrachloride	<0.0019		0.0019	0.00056	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Chlorobenzene	<0.0019		0.0019	0.00071	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Chloroform	<0.0019		0.0019	0.00067	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Chloromethane	<0.0048	*	0.0048	0.0019	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Dibromochloromethane	<0.0019		0.0019	0.00063	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Ethylbenzene	<0.0019		0.0019	0.00092	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00057	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Tetrachloroethene	<0.0019		0.0019	0.00066	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Toluene	<0.0019		0.0019	0.00049	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00085	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00068	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Vinyl chloride	<0.0019		0.0019	0.00085	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1
Xylenes, Total	<0.0039		0.0039	0.00062	mg/Kg	✳	01/18/23 18:32	01/25/23 15:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 134	01/18/23 18:32	01/25/23 15:24	1
4-Bromofluorobenzene (Surr)	113		75 - 131	01/18/23 18:32	01/25/23 15:24	1
Dibromofluoromethane	97		75 - 126	01/18/23 18:32	01/25/23 15:24	1
Toluene-d8 (Surr)	110		75 - 124	01/18/23 18:32	01/25/23 15:24	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	✳	01/25/23 12:47	01/26/23 15:35	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B04-1**

**Lab Sample ID: 500-228249-2**

Date Collected: 01/17/23 09:20

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 79.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
<b>2-Methylnaphthalene</b>	<b>0.014</b>	<b>J</b>	0.079	0.0072	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
<b>Acenaphthene</b>	<b>0.015</b>	<b>J</b>	0.039	0.0071	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
<b>Acenaphthylene</b>	<b>0.021</b>	<b>J</b>	0.039	0.0052	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
<b>Anthracene</b>	<b>0.065</b>		0.039	0.0066	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
<b>Benzo[a]anthracene</b>	<b>0.37</b>		0.039	0.0053	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
<b>Benzo[a]pyrene</b>	<b>0.47</b>		0.039	0.0076	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
<b>Benzo[b]fluoranthene</b>	<b>0.66</b>		0.039	0.0085	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
<b>Benzo[g,h,i]perylene</b>	<b>0.22</b>		0.039	0.013	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
<b>Benzo[k]fluoranthene</b>	<b>0.23</b>		0.039	0.012	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
Bis(2-chloroethyl)ether	<0.20	+	0.20	0.059	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
Carbazole	<0.20		0.20	0.098	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
<b>Chrysene</b>	<b>0.43</b>		0.039	0.011	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
<b>Dibenz(a,h)anthracene</b>	<b>0.077</b>		0.039	0.0076	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
<b>Fluoranthene</b>	<b>0.86</b>		0.039	0.0073	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
<b>Fluorene</b>	<b>0.019</b>	<b>J</b>	0.039	0.0055	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	✳	01/25/23 12:47	01/26/23 15:35	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B04-1**

**Lab Sample ID: 500-228249-2**

Date Collected: 01/17/23 09:20

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 79.5

**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>0.24</b>	<b>+</b>	0.039	0.010	mg/Kg	✱	01/25/23 12:47	01/26/23 15:35	1
Isophorone	<0.20		0.20	0.044	mg/Kg	✱	01/25/23 12:47	01/26/23 15:35	1
<b>Naphthalene</b>	<b>0.012</b>	<b>J</b>	0.039	0.0060	mg/Kg	✱	01/25/23 12:47	01/26/23 15:35	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	✱	01/25/23 12:47	01/26/23 15:35	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	✱	01/25/23 12:47	01/26/23 15:35	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	✱	01/25/23 12:47	01/26/23 15:35	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	✱	01/25/23 12:47	01/26/23 15:35	1
<b>Phenanthrene</b>	<b>0.35</b>		0.039	0.0055	mg/Kg	✱	01/25/23 12:47	01/26/23 15:35	1
Phenol	<0.20		0.20	0.087	mg/Kg	✱	01/25/23 12:47	01/26/23 15:35	1
<b>Pyrene</b>	<b>0.68</b>		0.039	0.0078	mg/Kg	✱	01/25/23 12:47	01/26/23 15:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	67		31 - 143				01/25/23 12:47	01/26/23 15:35	1
2-Fluorobiphenyl	45		43 - 145				01/25/23 12:47	01/26/23 15:35	1
2-Fluorophenol	51		31 - 166				01/25/23 12:47	01/26/23 15:35	1
Nitrobenzene-d5 (Surr)	33	S1-	37 - 147				01/25/23 12:47	01/26/23 15:35	1
Phenol-d5	47		30 - 153				01/25/23 12:47	01/26/23 15:35	1
Terphenyl-d14 (Surr)	94		42 - 157				01/25/23 12:47	01/26/23 15:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.30</b>	<b>J</b>	1.2	0.24	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Arsenic</b>	<b>12</b>		0.61	0.21	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Barium</b>	<b>79</b>		0.61	0.070	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Beryllium</b>	<b>0.70</b>		0.25	0.057	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Boron</b>	<b>6.9</b>		3.1	0.29	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Cadmium</b>	<b>0.79</b>		0.12	0.022	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Calcium</b>	<b>49000</b>	<b>B</b>	25	4.2	mg/Kg	✱	01/27/23 14:51	01/31/23 15:01	2
<b>Chromium</b>	<b>13</b>		0.61	0.30	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Cobalt</b>	<b>13</b>		0.31	0.080	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Copper</b>	<b>27</b>		0.61	0.17	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Iron</b>	<b>16000</b>		12	6.4	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Lead</b>	<b>94</b>		0.31	0.14	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Magnesium</b>	<b>26000</b>	<b>B</b>	6.1	3.0	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Manganese</b>	<b>500</b>		0.61	0.089	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Nickel</b>	<b>26</b>		0.61	0.18	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Potassium</b>	<b>1300</b>		31	11	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
Selenium	<0.61		0.61	0.36	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Silver</b>	<b>0.36</b>		0.31	0.079	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Sodium</b>	<b>450</b>		61	9.1	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
Thallium	<0.61		0.61	0.31	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Vanadium</b>	<b>17</b>		0.31	0.072	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	1
<b>Zinc</b>	<b>120</b>		1.2	0.54	mg/Kg	✱	01/27/23 14:51	01/30/23 17:51	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		02/01/23 16:26	02/02/23 12:58	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/01/23 16:26	02/02/23 12:58	1
Chromium	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 12:58	1
Iron	<0.40		0.40	0.20	mg/L		02/01/23 16:26	02/02/23 12:58	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B04-1**

**Lab Sample ID: 500-228249-2**

Date Collected: 01/17/23 09:20

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 79.5

**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		02/01/23 16:26	02/02/23 12:58	1
<b>Manganese</b>	<b>0.18</b>		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 12:58	1
Nickel	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 12:58	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		02/01/23 16:27	02/02/23 14:39	1
<b>Barium</b>	<b>0.72</b>		0.50	0.050	mg/L		02/01/23 16:27	02/02/23 14:39	1
<b>Beryllium</b>	<b>0.0083</b>		0.0040	0.0040	mg/L		02/01/23 16:27	02/02/23 14:39	1
<b>Boron</b>	<b>0.23</b>		0.10	0.050	mg/L		02/01/23 16:27	02/02/23 14:39	1
<b>Cadmium</b>	<b>0.0030</b>	J	0.0050	0.0020	mg/L		02/01/23 16:27	02/02/23 14:39	1
<b>Calcium</b>	<b>28</b>		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 14:39	1
<b>Chromium</b>	<b>0.17</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 14:39	1
<b>Cobalt</b>	<b>0.057</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 14:39	1
<b>Iron</b>	<b>180</b>		0.40	0.20	mg/L		02/01/23 16:27	02/02/23 14:39	1
<b>Lead</b>	<b>0.50</b>		0.0075	0.0075	mg/L		02/01/23 16:27	02/02/23 14:39	1
<b>Manganese</b>	<b>1.0</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 14:39	1
<b>Nickel</b>	<b>0.18</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 14:39	1
<b>Potassium</b>	<b>26</b>		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 14:39	1
Selenium	<0.050		0.050	0.020	mg/L		02/01/23 16:27	02/02/23 14:39	1
Silver	<0.025		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 14:39	1
<b>Zinc</b>	<b>1.1</b>		0.50	0.020	mg/L		02/01/23 16:27	02/02/23 14:39	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		02/01/23 16:26	02/03/23 12:24	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		02/01/23 16:27	02/03/23 11:25	1
<b>Thallium</b>	<b>0.0046</b>		0.0020	0.0020	mg/L		02/01/23 16:27	02/03/23 11:25	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		02/01/23 15:10	02/02/23 10:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.14</b>		0.020	0.010	mg/Kg	✱	01/27/23 13:45	01/30/23 08:13	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.26</b>	J B	0.60	0.23	mg/Kg	✱	01/23/23 16:08	01/23/23 17:32	1
<b>pH (SW846 9045D)</b>	<b>8.2</b>		0.2	0.2	SU			01/24/23 20:49	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B05**

**Lab Sample ID: 500-228249-4**

**Date Collected: 01/17/23 10:00**

**Matrix: Solid**

**Date Received: 01/18/23 11:25**

**Percent Solids: 85.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00056	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00072	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
1,1-Dichloroethene	<0.0017		0.0017	0.00058	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
1,2-Dichloroethane	<0.0042		0.0042	0.0013	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00059	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
2-Butanone (MEK)	<0.0042		0.0042	0.0019	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.0012	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Acetone	<0.017		0.017	0.0073	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Benzene	<0.0017		0.0017	0.00043	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Bromoform	<0.0017		0.0017	0.00049	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Carbon disulfide	<0.0042		0.0042	0.00087	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Carbon tetrachloride	<0.0017		0.0017	0.00049	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Chlorobenzene	<0.0017		0.0017	0.00062	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Chloroethane	<0.0042		0.0042	0.0012	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Chloromethane	<0.0042	*	0.0042	0.0017	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00047	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Dibromochloromethane	<0.0017		0.0017	0.00055	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Ethylbenzene	<0.0017		0.0017	0.00080	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Methylene Chloride	<0.0042		0.0042	0.0016	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Styrene	<0.0017		0.0017	0.00051	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Tetrachloroethene	<0.0017		0.0017	0.00057	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00074	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00059	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Trichloroethene	<0.0017		0.0017	0.00057	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Vinyl chloride	<0.0017		0.0017	0.00074	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1
Xylenes, Total	<0.0033		0.0033	0.00054	mg/Kg	✱	01/18/23 18:32	01/25/23 16:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		70 - 134	01/18/23 18:32	01/25/23 16:11	1
4-Bromofluorobenzene (Surr)	109		75 - 131	01/18/23 18:32	01/25/23 16:11	1
Dibromofluoromethane	97		75 - 126	01/18/23 18:32	01/25/23 16:11	1
Toluene-d8 (Surr)	110		75 - 124	01/18/23 18:32	01/25/23 16:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	✱	01/25/23 12:47	01/26/23 11:41	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	✱	01/25/23 12:47	01/26/23 11:41	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	✱	01/25/23 12:47	01/26/23 11:41	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	✱	01/25/23 12:47	01/26/23 11:41	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	✱	01/25/23 12:47	01/26/23 11:41	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B05**

**Lab Sample ID: 500-228249-4**

**Date Collected: 01/17/23 10:00**

**Matrix: Solid**

**Date Received: 01/18/23 11:25**

**Percent Solids: 85.8**

**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	☼	01/25/23 12:47	01/26/23 11:41	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
2-Methylnaphthalene	<0.076		0.076	0.0069	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
4,6-Dinitro-2-methylphenol	<0.76		0.76	0.30	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Bis(2-chloroethyl)ether	<0.19	+	0.19	0.056	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Carbazole	<0.19		0.19	0.094	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	01/25/23 12:47	01/26/23 11:41	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B05**

**Lab Sample ID: 500-228249-4**

Date Collected: 01/17/23 10:00

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 85.8

**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	✳	01/25/23 12:47	01/26/23 11:41	1
Isophorone	<0.19		0.19	0.042	mg/Kg	✳	01/25/23 12:47	01/26/23 11:41	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	✳	01/25/23 12:47	01/26/23 11:41	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	✳	01/25/23 12:47	01/26/23 11:41	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	✳	01/25/23 12:47	01/26/23 11:41	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	✳	01/25/23 12:47	01/26/23 11:41	1
Pentachlorophenol	<0.76		0.76	0.60	mg/Kg	✳	01/25/23 12:47	01/26/23 11:41	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	✳	01/25/23 12:47	01/26/23 11:41	1
Phenol	<0.19		0.19	0.083	mg/Kg	✳	01/25/23 12:47	01/26/23 11:41	1
Pyrene	<0.037		0.037	0.0075	mg/Kg	✳	01/25/23 12:47	01/26/23 11:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	81		31 - 143	01/25/23 12:47	01/26/23 11:41	1
2-Fluorobiphenyl	73		43 - 145	01/25/23 12:47	01/26/23 11:41	1
2-Fluorophenol	89		31 - 166	01/25/23 12:47	01/26/23 11:41	1
Nitrobenzene-d5 (Surr)	61		37 - 147	01/25/23 12:47	01/26/23 11:41	1
Phenol-d5	76		30 - 153	01/25/23 12:47	01/26/23 11:41	1
Terphenyl-d14 (Surr)	88		42 - 157	01/25/23 12:47	01/26/23 11:41	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	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Arsenic</b>	<b>8.3</b>		0.57	0.19	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Barium</b>	<b>40</b>		0.57	0.065	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Beryllium</b>	<b>0.57</b>		0.23	0.053	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Boron</b>	<b>7.8</b>		2.8	0.26	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Cadmium</b>	<b>0.21</b>		0.11	0.020	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Calcium</b>	<b>57000</b>	<b>B</b>	23	3.8	mg/Kg	✳	01/27/23 14:51	01/31/23 15:13	2
<b>Chromium</b>	<b>12</b>		0.57	0.28	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Cobalt</b>	<b>10</b>		0.28	0.074	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Copper</b>	<b>20</b>		0.57	0.16	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Iron</b>	<b>16000</b>		11	5.9	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Lead</b>	<b>15</b>		0.28	0.13	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Magnesium</b>	<b>31000</b>	<b>B</b>	5.7	2.8	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Manganese</b>	<b>320</b>		0.57	0.082	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Nickel</b>	<b>28</b>		0.57	0.16	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Potassium</b>	<b>1500</b>		28	10	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
Selenium	<0.57		0.57	0.33	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Silver</b>	<b>0.37</b>		0.28	0.073	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Sodium</b>	<b>1300</b>		57	8.4	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Thallium</b>	<b>0.33</b>	<b>J</b>	0.57	0.28	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Vanadium</b>	<b>14</b>		0.28	0.067	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	1
<b>Zinc</b>	<b>64</b>		1.1	0.50	mg/Kg	✳	01/27/23 14:51	01/30/23 18:04	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		02/01/23 16:26	02/02/23 13:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/01/23 16:26	02/02/23 13:10	1
Chromium	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:10	1
Iron	<0.40		0.40	0.20	mg/L		02/01/23 16:26	02/02/23 13:10	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B05**

**Lab Sample ID: 500-228249-4**

Date Collected: 01/17/23 10:00

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 85.8

**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		02/01/23 16:26	02/02/23 13:10	1
<b>Manganese</b>	<b>0.74</b>		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:10	1
Nickel	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.16</b>		0.050	0.010	mg/L		02/01/23 16:27	02/02/23 14:45	1
<b>Barium</b>	<b>0.43</b>	J	0.50	0.050	mg/L		02/01/23 16:27	02/02/23 14:45	1
<b>Beryllium</b>	<b>0.011</b>		0.0040	0.0040	mg/L		02/01/23 16:27	02/02/23 14:45	1
<b>Boron</b>	<b>0.25</b>		0.10	0.050	mg/L		02/01/23 16:27	02/02/23 14:45	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/01/23 16:27	02/02/23 14:45	1
<b>Calcium</b>	<b>19</b>		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 14:45	1
<b>Chromium</b>	<b>0.19</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 14:45	1
<b>Cobalt</b>	<b>0.088</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 14:45	1
<b>Iron</b>	<b>270</b>		0.40	0.20	mg/L		02/01/23 16:27	02/02/23 14:45	1
<b>Lead</b>	<b>0.15</b>		0.0075	0.0075	mg/L		02/01/23 16:27	02/02/23 14:45	1
<b>Manganese</b>	<b>0.94</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 14:45	1
<b>Nickel</b>	<b>0.28</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 14:45	1
<b>Potassium</b>	<b>38</b>		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 14:45	1
Selenium	<0.050		0.050	0.020	mg/L		02/01/23 16:27	02/02/23 14:45	1
Silver	<0.025		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 14:45	1
<b>Zinc</b>	<b>0.81</b>		0.50	0.020	mg/L		02/01/23 16:27	02/02/23 14:45	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		02/01/23 16:26	02/03/23 12:28	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		02/01/23 16:27	02/03/23 11:29	1
<b>Thallium</b>	<b>0.0063</b>		0.0020	0.0020	mg/L		02/01/23 16:27	02/03/23 11:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		02/01/23 15:10	02/02/23 10:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.035</b>		0.018	0.0093	mg/Kg	✱	01/27/23 13:45	01/30/23 08:17	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.32</b>	J B	0.58	0.22	mg/Kg	✱	01/23/23 16:10	01/23/23 17:35	1
<b>pH (SW846 9045D)</b>	<b>8.7</b>		0.2	0.2	SU			01/24/23 20:54	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B06-1**

**Lab Sample ID: 500-228249-5**

Date Collected: 01/17/23 10:30

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 85.6

**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	✳	01/18/23 18:32	01/25/23 16:34	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00061	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00082	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
1,1-Dichloroethane	<0.0019		0.0019	0.00066	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
1,1-Dichloroethene	<0.0019		0.0019	0.00066	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
1,2-Dichloroethane	<0.0048		0.0048	0.0015	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
1,2-Dichloropropane	<0.0019		0.0019	0.00050	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00067	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
2-Butanone (MEK)	<0.0048		0.0048	0.0021	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0014	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Acetone	<0.019		0.019	0.0083	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Benzene	<0.0019		0.0019	0.00049	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Bromodichloromethane	<0.0019		0.0019	0.00039	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Bromoform	<0.0019		0.0019	0.00056	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Carbon disulfide	<0.0048		0.0048	0.0010	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Carbon tetrachloride	<0.0019		0.0019	0.00056	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Chlorobenzene	<0.0019		0.0019	0.00071	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Chloroethane	<0.0048		0.0048	0.0014	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Chloroform	<0.0019		0.0019	0.00066	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Chloromethane	<0.0048	*	0.0048	0.0019	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00054	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
cis-1,3-Dichloropropene	<0.0019		0.0019	0.00058	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Dibromochloromethane	<0.0019		0.0019	0.00063	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Ethylbenzene	<0.0019		0.0019	0.00092	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00056	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Methylene Chloride	<0.0048		0.0048	0.0019	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Styrene	<0.0019		0.0019	0.00058	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Tetrachloroethene	<0.0019		0.0019	0.00065	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Toluene	<0.0019		0.0019	0.00048	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00085	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00067	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Trichloroethene	<0.0019		0.0019	0.00065	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Vinyl chloride	<0.0019		0.0019	0.00085	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1
Xylenes, Total	<0.0038		0.0038	0.00061	mg/Kg	✳	01/18/23 18:32	01/25/23 16:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		70 - 134	01/18/23 18:32	01/25/23 16:34	1
4-Bromofluorobenzene (Surr)	106		75 - 131	01/18/23 18:32	01/25/23 16:34	1
Dibromofluoromethane	97		75 - 126	01/18/23 18:32	01/25/23 16:34	1
Toluene-d8 (Surr)	109		75 - 124	01/18/23 18:32	01/25/23 16:34	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	✳	01/25/23 12:47	01/26/23 12:02	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	✳	01/25/23 12:47	01/26/23 12:02	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	✳	01/25/23 12:47	01/26/23 12:02	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	✳	01/25/23 12:47	01/26/23 12:02	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	✳	01/25/23 12:47	01/26/23 12:02	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B06-1**

**Lab Sample ID: 500-228249-5**

Date Collected: 01/17/23 10:30

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 85.6

**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	✱	01/25/23 12:47	01/26/23 12:02	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
2-Methylnaphthalene	<0.074		0.074	0.0067	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Benzo[a]pyrene	<0.036		0.036	0.0071	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Bis(2-chloroethyl)ether	<0.18	+	0.18	0.055	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Carbazole	<0.18		0.18	0.091	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Chrysene	<0.036		0.036	0.010	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Fluoranthene	<0.036		0.036	0.0068	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	✱	01/25/23 12:47	01/26/23 12:02	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B06-1**

**Lab Sample ID: 500-228249-5**

Date Collected: 01/17/23 10:30

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 85.6

**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	<0.036	*+	0.036	0.0095	mg/Kg	✳	01/25/23 12:47	01/26/23 12:02	1
Isophorone	<0.18		0.18	0.041	mg/Kg	✳	01/25/23 12:47	01/26/23 12:02	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	✳	01/25/23 12:47	01/26/23 12:02	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	✳	01/25/23 12:47	01/26/23 12:02	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	✳	01/25/23 12:47	01/26/23 12:02	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	✳	01/25/23 12:47	01/26/23 12:02	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	✳	01/25/23 12:47	01/26/23 12:02	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	✳	01/25/23 12:47	01/26/23 12:02	1
Phenol	<0.18		0.18	0.081	mg/Kg	✳	01/25/23 12:47	01/26/23 12:02	1
Pyrene	<0.036		0.036	0.0073	mg/Kg	✳	01/25/23 12:47	01/26/23 12:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	86		31 - 143				01/25/23 12:47	01/26/23 12:02	1
2-Fluorobiphenyl	80		43 - 145				01/25/23 12:47	01/26/23 12:02	1
2-Fluorophenol	100		31 - 166				01/25/23 12:47	01/26/23 12:02	1
Nitrobenzene-d5 (Surr)	66		37 - 147				01/25/23 12:47	01/26/23 12:02	1
Phenol-d5	91		30 - 153				01/25/23 12:47	01/26/23 12:02	1
Terphenyl-d14 (Surr)	106		42 - 157				01/25/23 12:47	01/26/23 12:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.29	J	1.2	0.23	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Arsenic	8.9		0.58	0.20	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Barium	28		0.58	0.066	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Beryllium	0.57		0.23	0.054	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Boron	7.4		2.9	0.27	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Cadmium	0.15		0.12	0.021	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Calcium	46000	B	23	3.9	mg/Kg	✳	01/27/23 14:51	01/31/23 15:17	2
Chromium	12		0.58	0.29	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Cobalt	12		0.29	0.076	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Copper	24		0.58	0.16	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Iron	17000		12	6.0	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Lead	15		0.29	0.13	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Magnesium	25000	B	5.8	2.9	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Manganese	320		0.58	0.084	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Nickel	29		0.58	0.17	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Potassium	1500		29	10	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Selenium	<0.58		0.58	0.34	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Silver	0.35		0.29	0.075	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Sodium	1500		58	8.6	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Thallium	0.50	J	0.58	0.29	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Vanadium	15		0.29	0.068	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	1
Zinc	59		1.2	0.51	mg/Kg	✳	01/27/23 14:51	01/30/23 18:07	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		02/01/23 16:26	02/02/23 13:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/01/23 16:26	02/02/23 13:14	1
Chromium	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:14	1
Iron	<0.40		0.40	0.20	mg/L		02/01/23 16:26	02/02/23 13:14	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B06-1**

**Lab Sample ID: 500-228249-5**

Date Collected: 01/17/23 10:30

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 85.6

**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		02/01/23 16:26	02/02/23 13:14	1
<b>Manganese</b>	<b>0.90</b>		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:14	1
Nickel	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.13</b>		0.050	0.010	mg/L		02/01/23 16:27	02/02/23 14:48	1
<b>Barium</b>	<b>0.52</b>		0.50	0.050	mg/L		02/01/23 16:27	02/02/23 14:48	1
<b>Beryllium</b>	<b>0.0099</b>		0.0040	0.0040	mg/L		02/01/23 16:27	02/02/23 14:48	1
<b>Boron</b>	<b>0.22</b>		0.10	0.050	mg/L		02/01/23 16:27	02/02/23 14:48	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/01/23 16:27	02/02/23 14:48	1
<b>Calcium</b>	<b>33</b>		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 14:48	1
<b>Chromium</b>	<b>0.19</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 14:48	1
<b>Cobalt</b>	<b>0.093</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 14:48	1
<b>Iron</b>	<b>250</b>		0.40	0.20	mg/L		02/01/23 16:27	02/02/23 14:48	1
<b>Lead</b>	<b>0.16</b>		0.0075	0.0075	mg/L		02/01/23 16:27	02/02/23 14:48	1
<b>Manganese</b>	<b>1.2</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 14:48	1
<b>Nickel</b>	<b>0.30</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 14:48	1
<b>Potassium</b>	<b>37</b>		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 14:48	1
Selenium	<0.050		0.050	0.020	mg/L		02/01/23 16:27	02/02/23 14:48	1
Silver	<0.025		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 14:48	1
<b>Zinc</b>	<b>0.70</b>		0.50	0.020	mg/L		02/01/23 16:27	02/02/23 14:48	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		02/01/23 16:26	02/03/23 12:34	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		02/01/23 16:27	02/03/23 11:31	1
<b>Thallium</b>	<b>0.0064</b>		0.0020	0.0020	mg/L		02/01/23 16:27	02/03/23 11:31	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		02/01/23 15:10	02/02/23 10:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.023</b>		0.017	0.0092	mg/Kg	✱	01/27/23 13:45	01/30/23 08:19	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.40</b>	<b>J B</b>	0.61	0.23	mg/Kg	✱	01/23/23 16:11	01/23/23 17:37	1
<b>pH (SW846 9045D)</b>	<b>8.7</b>		0.2	0.2	SU			01/24/23 20:57	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B10-1**

**Lab Sample ID: 500-228249-9**

**Date Collected: 01/17/23 11:40**

**Matrix: Solid**

**Date Received: 01/18/23 11:25**

**Percent Solids: 83.4**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00061	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00058	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00078	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
<b>Acetone</b>	<b>0.013</b>	<b>J</b>	0.018	0.0079	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Chlorobenzene	<0.0018		0.0018	0.00067	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Chloroform	<0.0018		0.0018	0.00063	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Chloromethane	<0.0045	*	0.0045	0.0018	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Ethylbenzene	<0.0018		0.0018	0.00087	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Styrene	<0.0018		0.0018	0.00055	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Tetrachloroethene	<0.0018		0.0018	0.00062	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	✳	01/18/23 18:32	01/25/23 18:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 134	01/18/23 18:32	01/25/23 18:15	1
4-Bromofluorobenzene (Surr)	105		75 - 131	01/18/23 18:32	01/25/23 18:15	1
Dibromofluoromethane	97		75 - 126	01/18/23 18:32	01/25/23 18:15	1
Toluene-d8 (Surr)	108		75 - 124	01/18/23 18:32	01/25/23 18:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
1,2-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B10-1**

**Lab Sample ID: 500-228249-9**

**Date Collected: 01/17/23 11:40**

**Matrix: Solid**

**Date Received: 01/18/23 11:25**

**Percent Solids: 83.4**

**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	✳	01/25/23 12:47	01/26/23 13:27	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
2,6-Dinitrotoluene	<0.20		0.20	0.076	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
2-Chlorophenol	<0.20		0.20	0.066	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
2-Methylnaphthalene	<0.078		0.078	0.0071	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
2-Methylphenol	<0.20		0.20	0.062	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
2-Nitroaniline	<0.20		0.20	0.052	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.054	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
4,6-Dinitro-2-methylphenol	<0.78		0.78	0.31	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.051	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.045	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Bis(2-chloroethyl)ether	<0.20	+	0.20	0.058	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Carbazole	<0.20		0.20	0.097	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Chrysene	<0.039		0.039	0.011	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Dibenzofuran	<0.20		0.20	0.045	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Di-n-butyl phthalate	<0.20		0.20	0.059	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Di-n-octyl phthalate	<0.20		0.20	0.063	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B10-1**

**Lab Sample ID: 500-228249-9**

Date Collected: 01/17/23 11:40

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 83.4

## 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	*+	0.039	0.010	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Isophorone	<0.20		0.20	0.044	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
N-Nitrosodi-n-propylamine	<0.078		0.078	0.047	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Phenol	<0.20		0.20	0.086	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Pyrene	<0.039		0.039	0.0077	mg/Kg	✳	01/25/23 12:47	01/26/23 13:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	91		31 - 143				01/25/23 12:47	01/26/23 13:27	1
2-Fluorobiphenyl	75		43 - 145				01/25/23 12:47	01/26/23 13:27	1
2-Fluorophenol	93		31 - 166				01/25/23 12:47	01/26/23 13:27	1
Nitrobenzene-d5 (Surr)	61		37 - 147				01/25/23 12:47	01/26/23 13:27	1
Phenol-d5	91		30 - 153				01/25/23 12:47	01/26/23 13:27	1
Terphenyl-d14 (Surr)	108		42 - 157				01/25/23 12:47	01/26/23 13:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.31</b>	<b>J</b>	1.2	0.22	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Arsenic</b>	<b>10</b>		0.58	0.20	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Barium</b>	<b>41</b>		0.58	0.066	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Beryllium</b>	<b>0.78</b>		0.23	0.054	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Boron</b>	<b>6.9</b>		2.9	0.27	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Cadmium</b>	<b>0.22</b>		0.12	0.021	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Calcium</b>	<b>25000</b>	<b>B</b>	12	2.0	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Chromium</b>	<b>14</b>		0.58	0.29	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Cobalt</b>	<b>11</b>		0.29	0.075	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Copper</b>	<b>24</b>		0.58	0.16	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Iron</b>	<b>22000</b>		12	6.0	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Lead</b>	<b>16</b>		0.29	0.13	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Magnesium</b>	<b>18000</b>	<b>B</b>	5.8	2.9	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Manganese</b>	<b>270</b>		0.58	0.084	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Nickel</b>	<b>28</b>		0.58	0.17	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Potassium</b>	<b>1700</b>		29	10	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
Selenium	<0.58		0.58	0.34	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Silver</b>	<b>0.39</b>		0.29	0.074	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Sodium</b>	<b>2500</b>		58	8.5	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
Thallium	<0.58		0.58	0.29	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Vanadium</b>	<b>19</b>		0.29	0.068	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	1
<b>Zinc</b>	<b>59</b>		1.2	0.51	mg/Kg	✳	01/27/23 14:51	01/30/23 18:20	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		02/01/23 16:26	02/02/23 13:27	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/01/23 16:26	02/02/23 13:27	1
Chromium	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:27	1
Iron	<0.40		0.40	0.20	mg/L		02/01/23 16:26	02/02/23 13:27	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B10-1**

**Lab Sample ID: 500-228249-9**

Date Collected: 01/17/23 11:40

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 83.4

**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		02/01/23 16:26	02/02/23 13:27	1
Manganese	6.8		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:27	1
Nickel	0.012	J	0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:27	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		02/01/23 16:27	02/02/23 15:00	1
Barium	1.7		0.50	0.050	mg/L		02/01/23 16:27	02/02/23 15:00	1
Beryllium	0.012		0.0040	0.0040	mg/L		02/01/23 16:27	02/02/23 15:00	1
Boron	0.21		0.10	0.050	mg/L		02/01/23 16:27	02/02/23 15:00	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/01/23 16:27	02/02/23 15:00	1
Calcium	20		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 15:00	1
Chromium	0.27		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:00	1
Cobalt	0.17		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:00	1
Iron	280		0.40	0.20	mg/L		02/01/23 16:27	02/02/23 15:00	1
Lead	0.16		0.0075	0.0075	mg/L		02/01/23 16:27	02/02/23 15:00	1
Manganese	4.0		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:00	1
Nickel	0.38		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:00	1
Potassium	34		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 15:00	1
Selenium	<0.050		0.050	0.020	mg/L		02/01/23 16:27	02/02/23 15:00	1
Silver	<0.025		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:00	1
Zinc	0.73		0.50	0.020	mg/L		02/01/23 16:27	02/02/23 15:00	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		02/01/23 16:26	02/03/23 12:42	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		02/01/23 16:27	02/03/23 11:43	1
Thallium	0.0065		0.0020	0.0020	mg/L		02/01/23 16:27	02/03/23 11:43	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		02/01/23 15:10	02/02/23 10:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.019	0.010	mg/Kg	✱	01/27/23 13:45	01/30/23 08:27	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.62		0.62	0.24	mg/Kg	✱	01/25/23 13:01	01/25/23 14:10	1
pH (SW846 9045D)	7.8		0.2	0.2	SU			01/24/23 21:09	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B11**

**Lab Sample ID: 500-228249-10**

**Date Collected: 01/17/23 11:50**

**Matrix: Solid**

**Date Received: 01/18/23 11:25**

**Percent Solids: 86.9**

**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	0.00067	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
1,2-Dichloroethane	<0.0050		0.0050	0.0015	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00070	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
2-Butanone (MEK)	<0.0050		0.0050	0.0022	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
2-Hexanone	<0.0050		0.0050	0.0015	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0015	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Acetone	<0.020		0.020	0.0086	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Benzene	<0.0020		0.0020	0.00051	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Carbon disulfide	<0.0050		0.0050	0.0010	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Carbon tetrachloride	<0.0020		0.0020	0.00058	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Chloroethane	<0.0050		0.0050	0.0015	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Chloroform	<0.0020		0.0020	0.00069	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Chloromethane	<0.0050	*	0.0050	0.0020	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00056	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00060	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Dibromochloromethane	<0.0020		0.0020	0.00065	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Ethylbenzene	<0.0020		0.0020	0.00095	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Methylene Chloride	<0.0050		0.0050	0.0020	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Tetrachloroethene	<0.0020		0.0020	0.00068	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00088	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00070	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Vinyl chloride	<0.0020		0.0020	0.00088	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1
Xylenes, Total	<0.0040		0.0040	0.00064	mg/Kg	☆	01/18/23 18:32	01/25/23 18:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 134	01/18/23 18:32	01/25/23 18:39	1
4-Bromofluorobenzene (Surr)	105		75 - 131	01/18/23 18:32	01/25/23 18:39	1
Dibromofluoromethane	96		75 - 126	01/18/23 18:32	01/25/23 18:39	1
Toluene-d8 (Surr)	109		75 - 124	01/18/23 18:32	01/25/23 18:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☆	01/25/23 12:47	01/26/23 13:49	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☆	01/25/23 12:47	01/26/23 13:49	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☆	01/25/23 12:47	01/26/23 13:49	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☆	01/25/23 12:47	01/26/23 13:49	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☆	01/25/23 12:47	01/26/23 13:49	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B11**

**Lab Sample ID: 500-228249-10**

**Date Collected: 01/17/23 11:50**

**Matrix: Solid**

**Date Received: 01/18/23 11:25**

**Percent Solids: 86.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.085	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
2-Methylnaphthalene	<0.075		0.075	0.0068	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
4-Chloroaniline	<0.75		0.75	0.17	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Bis(2-chloroethyl)ether	<0.19	+	0.19	0.056	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Carbazole	<0.19		0.19	0.093	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Chrysene	<0.037		0.037	0.010	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Fluoranthene	<0.037		0.037	0.0069	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B11**

**Lab Sample ID: 500-228249-10**

Date Collected: 01/17/23 11:50

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 86.9

**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	<0.037	*+	0.037	0.0096	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Isophorone	<0.19		0.19	0.042	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.045	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Phenol	<0.19		0.19	0.082	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Pyrene	<0.037		0.037	0.0074	mg/Kg	✳	01/25/23 12:47	01/26/23 13:49	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	83		31 - 143				01/25/23 12:47	01/26/23 13:49	1
2-Fluorobiphenyl	78		43 - 145				01/25/23 12:47	01/26/23 13:49	1
2-Fluorophenol	98		31 - 166				01/25/23 12:47	01/26/23 13:49	1
Nitrobenzene-d5 (Surr)	63		37 - 147				01/25/23 12:47	01/26/23 13:49	1
Phenol-d5	92		30 - 153				01/25/23 12:47	01/26/23 13:49	1
Terphenyl-d14 (Surr)	106		42 - 157				01/25/23 12:47	01/26/23 13:49	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	✳	01/27/23 14:51	01/30/23 18:24	1
<b>Arsenic</b>	<b>6.6</b>		0.56	0.19	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
<b>Barium</b>	<b>37</b>		2.8	0.32	mg/Kg	✳	01/27/23 14:51	01/31/23 15:23	5
<b>Beryllium</b>	<b>0.45</b>		0.22	0.052	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
<b>Boron</b>	<b>6.5</b>		2.8	0.26	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
<b>Cadmium</b>	<b>0.16</b>		0.11	0.020	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
<b>Calcium</b>	<b>81000</b>	<b>B</b>	56	9.5	mg/Kg	✳	01/27/23 14:51	01/31/23 15:23	5
<b>Chromium</b>	<b>8.8</b>		0.56	0.28	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
<b>Cobalt</b>	<b>7.4</b>		0.28	0.073	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
<b>Copper</b>	<b>13</b>		0.56	0.16	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
<b>Iron</b>	<b>18000</b>		56	29	mg/Kg	✳	01/27/23 14:51	01/31/23 15:23	5
<b>Lead</b>	<b>8.9</b>		0.28	0.13	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
<b>Magnesium</b>	<b>51000</b>	<b>B</b>	28	14	mg/Kg	✳	01/27/23 14:51	01/31/23 15:23	5
<b>Manganese</b>	<b>230</b>		0.56	0.081	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
<b>Nickel</b>	<b>18</b>		0.56	0.16	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
<b>Potassium</b>	<b>1100</b>		28	9.9	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
Selenium	<0.56		0.56	0.33	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
<b>Silver</b>	<b>0.27</b>	<b>J</b>	0.28	0.072	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
<b>Sodium</b>	<b>1400</b>		56	8.3	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
Thallium	<0.56		0.56	0.28	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
<b>Vanadium</b>	<b>12</b>		0.28	0.066	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	1
<b>Zinc</b>	<b>38</b>		1.1	0.49	mg/Kg	✳	01/27/23 14:51	01/30/23 18:24	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		02/01/23 16:26	02/02/23 13:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/01/23 16:26	02/02/23 13:30	1
Chromium	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:30	1
Iron	<0.40		0.40	0.20	mg/L		02/01/23 16:26	02/02/23 13:30	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B11**

**Lab Sample ID: 500-228249-10**

Date Collected: 01/17/23 11:50

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 86.9

**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		02/01/23 16:26	02/02/23 13:30	1
<b>Manganese</b>	<b>0.59</b>		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:30	1
Nickel	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.098</b>		0.050	0.010	mg/L		02/01/23 16:27	02/02/23 15:03	1
<b>Barium</b>	<b>0.46</b>	J	0.50	0.050	mg/L		02/01/23 16:27	02/02/23 15:03	1
<b>Beryllium</b>	<b>0.0074</b>		0.0040	0.0040	mg/L		02/01/23 16:27	02/02/23 15:03	1
<b>Boron</b>	<b>0.15</b>		0.10	0.050	mg/L		02/01/23 16:27	02/02/23 15:03	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/01/23 16:27	02/02/23 15:03	1
<b>Calcium</b>	<b>16</b>		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 15:03	1
<b>Chromium</b>	<b>0.14</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:03	1
<b>Cobalt</b>	<b>0.072</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:03	1
<b>Iron</b>	<b>210</b>		0.40	0.20	mg/L		02/01/23 16:27	02/02/23 15:03	1
<b>Lead</b>	<b>0.081</b>		0.0075	0.0075	mg/L		02/01/23 16:27	02/02/23 15:03	1
<b>Manganese</b>	<b>1.1</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:03	1
<b>Nickel</b>	<b>0.20</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:03	1
<b>Potassium</b>	<b>25</b>		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 15:03	1
Selenium	<0.050		0.050	0.020	mg/L		02/01/23 16:27	02/02/23 15:03	1
Silver	<0.025		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:03	1
<b>Zinc</b>	<b>0.44</b>	J	0.50	0.020	mg/L		02/01/23 16:27	02/02/23 15:03	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		02/01/23 16:26	02/03/23 12:44	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		02/01/23 16:27	02/03/23 11:45	1
<b>Thallium</b>	<b>0.0039</b>		0.0020	0.0020	mg/L		02/01/23 16:27	02/03/23 11:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		02/01/23 15:10	02/02/23 11:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.019</b>		0.018	0.0098	mg/Kg	✱	01/27/23 13:45	01/30/23 08:29	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.58		0.58	0.22	mg/Kg	✱	01/25/23 13:03	01/25/23 14:12	1
<b>pH (SW846 9045D)</b>	<b>7.7</b>		0.2	0.2	SU			01/24/23 21:14	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B11 DUP**

**Lab Sample ID: 500-228249-11**

Date Collected: 01/17/23 12:00

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00056	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00075	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
1,1-Dichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
1,1-Dichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
1,2-Dichloroethane	<0.0044		0.0044	0.0014	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
1,2-Dichloropropane	<0.0018		0.0018	0.00045	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00062	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
2-Butanone (MEK)	<0.0044		0.0044	0.0019	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
2-Hexanone	<0.0044		0.0044	0.0014	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
4-Methyl-2-pentanone (MIBK)	<0.0044		0.0044	0.0013	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Acetone	<0.018		0.018	0.0076	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Bromoform	<0.0018		0.0018	0.00051	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Bromomethane	<0.0044		0.0044	0.0017	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Carbon disulfide	<0.0044		0.0044	0.00091	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Carbon tetrachloride	<0.0018		0.0018	0.00051	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Chlorobenzene	<0.0018		0.0018	0.00065	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Chloroethane	<0.0044	+	0.0044	0.0013	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Chloroform	<0.0018		0.0018	0.00061	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Chloromethane	<0.0044		0.0044	0.0018	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00049	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
cis-1,3-Dichloropropene	<0.0018	-	0.0018	0.00053	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Dibromochloromethane	<0.0018		0.0018	0.00057	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Ethylbenzene	<0.0018		0.0018	0.00084	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00051	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Methylene Chloride	<0.0044		0.0044	0.0017	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Styrene	<0.0018		0.0018	0.00053	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Tetrachloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Toluene	<0.0018		0.0018	0.00044	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00078	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00062	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Trichloroethene	<0.0018		0.0018	0.00059	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Vinyl chloride	<0.0018		0.0018	0.00078	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	01/18/23 18:32	01/26/23 11:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		70 - 134	01/18/23 18:32	01/26/23 11:17	1
4-Bromofluorobenzene (Surr)	95		75 - 131	01/18/23 18:32	01/26/23 11:17	1
Dibromofluoromethane	109		75 - 126	01/18/23 18:32	01/26/23 11:17	1
Toluene-d8 (Surr)	85		75 - 124	01/18/23 18:32	01/26/23 11:17	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	☼	01/25/23 12:47	01/26/23 14:10	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	01/25/23 12:47	01/26/23 14:10	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	01/25/23 12:47	01/26/23 14:10	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	01/25/23 12:47	01/26/23 14:10	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	01/25/23 12:47	01/26/23 14:10	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B11 DUP**

**Lab Sample ID: 500-228249-11**

Date Collected: 01/17/23 12:00

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 82.3

**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	✱	01/25/23 12:47	01/26/23 14:10	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Bis(2-chloroethyl)ether	<0.20	+	0.20	0.059	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Carbazole	<0.20		0.20	0.098	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Chrysene	<0.039		0.039	0.011	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	✱	01/25/23 12:47	01/26/23 14:10	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B11 DUP**

**Lab Sample ID: 500-228249-11**

Date Collected: 01/17/23 12:00

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 82.3

**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	*+	0.039	0.010	mg/Kg	✳	01/25/23 12:47	01/26/23 14:10	1
Isophorone	<0.20		0.20	0.044	mg/Kg	✳	01/25/23 12:47	01/26/23 14:10	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	✳	01/25/23 12:47	01/26/23 14:10	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	✳	01/25/23 12:47	01/26/23 14:10	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	✳	01/25/23 12:47	01/26/23 14:10	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	✳	01/25/23 12:47	01/26/23 14:10	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	✳	01/25/23 12:47	01/26/23 14:10	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	✳	01/25/23 12:47	01/26/23 14:10	1
Phenol	<0.20		0.20	0.087	mg/Kg	✳	01/25/23 12:47	01/26/23 14:10	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	✳	01/25/23 12:47	01/26/23 14:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	84		31 - 143	01/25/23 12:47	01/26/23 14:10	1
2-Fluorobiphenyl	71		43 - 145	01/25/23 12:47	01/26/23 14:10	1
2-Fluorophenol	88		31 - 166	01/25/23 12:47	01/26/23 14:10	1
Nitrobenzene-d5 (Surr)	58		37 - 147	01/25/23 12:47	01/26/23 14:10	1
Phenol-d5	84		30 - 153	01/25/23 12:47	01/26/23 14:10	1
Terphenyl-d14 (Surr)	108		42 - 157	01/25/23 12:47	01/26/23 14:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.29</b>	<b>J</b>	1.2	0.23	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Arsenic</b>	<b>10</b>		0.59	0.20	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Barium</b>	<b>86</b>		0.59	0.067	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Beryllium</b>	<b>0.79</b>		0.24	0.055	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Boron</b>	<b>5.1</b>		3.0	0.28	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Cadmium</b>	<b>0.26</b>		0.12	0.021	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Calcium</b>	<b>7000</b>	<b>B</b>	12	2.0	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Chromium</b>	<b>15</b>		0.59	0.29	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Cobalt</b>	<b>16</b>		0.30	0.077	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Copper</b>	<b>15</b>		0.59	0.17	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Iron</b>	<b>23000</b>		12	6.1	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Lead</b>	<b>16</b>		0.30	0.14	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Magnesium</b>	<b>6400</b>	<b>B</b>	5.9	2.9	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Manganese</b>	<b>460</b>		0.59	0.086	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Nickel</b>	<b>36</b>		0.59	0.17	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Potassium</b>	<b>1400</b>		30	10	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Selenium</b>	<b>0.77</b>		0.59	0.35	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Silver</b>	<b>0.49</b>		0.30	0.076	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Sodium</b>	<b>2600</b>		59	8.7	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
Thallium	<0.59		0.59	0.29	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Vanadium</b>	<b>21</b>		0.30	0.070	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	1
<b>Zinc</b>	<b>60</b>		1.2	0.52	mg/Kg	✳	01/27/23 14:51	01/30/23 18:27	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		02/01/23 16:26	02/02/23 13:33	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/01/23 16:26	02/02/23 13:33	1
Chromium	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:33	1
Iron	<0.40		0.40	0.20	mg/L		02/01/23 16:26	02/02/23 13:33	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B11 DUP**

**Lab Sample ID: 500-228249-11**

Date Collected: 01/17/23 12:00

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 82.3

**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		02/01/23 16:26	02/02/23 13:33	1
<b>Manganese</b>	<b>0.51</b>		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:33	1
Nickel	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.13</b>		0.050	0.010	mg/L		02/01/23 16:27	02/02/23 15:16	1
<b>Barium</b>	<b>1.4</b>		0.50	0.050	mg/L		02/01/23 16:27	02/02/23 15:16	1
<b>Beryllium</b>	<b>0.015</b>		0.0040	0.0040	mg/L		02/01/23 16:27	02/02/23 15:16	1
<b>Boron</b>	<b>0.22</b>		0.10	0.050	mg/L		02/01/23 16:27	02/02/23 15:16	1
<b>Cadmium</b>	<b>0.0022</b>	J	0.0050	0.0020	mg/L		02/01/23 16:27	02/02/23 15:16	1
<b>Calcium</b>	<b>28</b>		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 15:16	1
<b>Chromium</b>	<b>0.30</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:16	1
<b>Cobalt</b>	<b>0.14</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:16	1
<b>Iron</b>	<b>340</b>		0.40	0.20	mg/L		02/01/23 16:27	02/02/23 15:16	1
<b>Lead</b>	<b>0.12</b>		0.0075	0.0075	mg/L		02/01/23 16:27	02/02/23 15:16	1
<b>Manganese</b>	<b>2.0</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:16	1
<b>Nickel</b>	<b>0.40</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:16	1
<b>Potassium</b>	<b>44</b>		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 15:16	1
Selenium	<0.050		0.050	0.020	mg/L		02/01/23 16:27	02/02/23 15:16	1
Silver	<0.025		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:16	1
<b>Zinc</b>	<b>0.83</b>		0.50	0.020	mg/L		02/01/23 16:27	02/02/23 15:16	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		02/01/23 16:26	02/03/23 12:46	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		02/01/23 16:27	02/03/23 11:47	1
<b>Thallium</b>	<b>0.0090</b>		0.0020	0.0020	mg/L		02/01/23 16:27	02/03/23 11:47	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		02/01/23 15:10	02/02/23 11:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.027</b>		0.019	0.010	mg/Kg	✱	01/27/23 13:45	01/30/23 08:35	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	✱	01/25/23 13:04	01/25/23 14:14	1
<b>pH (SW846 9045D)</b>	<b>7.9</b>		0.2	0.2	SU			01/24/23 21:16	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B12-1**

**Lab Sample ID: 500-228249-12**

Date Collected: 01/17/23 12:10

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0021		0.0021	0.00069	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00066	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00089	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
1,1-Dichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
1,1-Dichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
1,2-Dichloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
1,2-Dichloropropane	<0.0021		0.0021	0.00053	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00073	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
2-Butanone (MEK)	<0.0052		0.0052	0.0023	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0015	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Acetone	<0.021	*+	0.021	0.0090	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Benzene	<0.0021		0.0021	0.00053	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Bromodichloromethane	<0.0021		0.0021	0.00042	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Bromoform	<0.0021		0.0021	0.00060	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Bromomethane	<0.0052		0.0052	0.0020	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Carbon disulfide	<0.0052		0.0052	0.0011	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Carbon tetrachloride	<0.0021		0.0021	0.00060	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Chlorobenzene	<0.0021		0.0021	0.00076	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Chloroethane	<0.0052		0.0052	0.0015	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Chloroform	<0.0021		0.0021	0.00072	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Chloromethane	<0.0052		0.0052	0.0021	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00058	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00062	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Dibromochloromethane	<0.0021		0.0021	0.00068	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Ethylbenzene	<0.0021		0.0021	0.00099	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00061	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Methylene Chloride	<0.0052		0.0052	0.0020	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Styrene	<0.0021		0.0021	0.00062	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Tetrachloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Toluene	<0.0021		0.0021	0.00052	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00092	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00073	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Trichloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Vinyl chloride	<0.0021		0.0021	0.00091	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1
Xylenes, Total	<0.0041		0.0041	0.00066	mg/Kg	☼	01/18/23 18:32	01/27/23 10:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		70 - 134	01/18/23 18:32	01/27/23 10:51	1
4-Bromofluorobenzene (Surr)	87		75 - 131	01/18/23 18:32	01/27/23 10:51	1
Dibromofluoromethane	109		75 - 126	01/18/23 18:32	01/27/23 10:51	1
Toluene-d8 (Surr)	88		75 - 124	01/18/23 18:32	01/27/23 10:51	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	☼	01/25/23 12:47	01/26/23 14:31	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	01/25/23 12:47	01/26/23 14:31	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	01/25/23 12:47	01/26/23 14:31	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	01/25/23 12:47	01/26/23 14:31	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	01/25/23 12:47	01/26/23 14:31	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B12-1**

**Lab Sample ID: 500-228249-12**

Date Collected: 01/17/23 12:10

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 82.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Bis(2-chloroethyl)ether	<0.20	+	0.20	0.059	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.071	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Butyl benzyl phthalate	<0.20		0.20	0.074	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Carbazole	<0.20		0.20	0.098	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Chrysene	<0.039		0.039	0.011	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Hexachlorobutadiene	<0.20		0.20	0.061	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Hexachlorocyclopentadiene	<0.79		0.79	0.22	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1
Hexachloroethane	<0.20		0.20	0.059	mg/Kg	✱	01/25/23 12:47	01/26/23 14:31	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B12-1**

**Lab Sample ID: 500-228249-12**

Date Collected: 01/17/23 12:10

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 82.8

**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	<0.039	*+	0.039	0.010	mg/Kg	☼	01/25/23 12:47	01/26/23 14:31	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	01/25/23 12:47	01/26/23 14:31	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	01/25/23 12:47	01/26/23 14:31	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	01/25/23 12:47	01/26/23 14:31	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	01/25/23 12:47	01/26/23 14:31	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	01/25/23 12:47	01/26/23 14:31	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	01/25/23 12:47	01/26/23 14:31	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	01/25/23 12:47	01/26/23 14:31	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	01/25/23 12:47	01/26/23 14:31	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	01/25/23 12:47	01/26/23 14:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	80		31 - 143				01/25/23 12:47	01/26/23 14:31	1
2-Fluorobiphenyl	63		43 - 145				01/25/23 12:47	01/26/23 14:31	1
2-Fluorophenol	87		31 - 166				01/25/23 12:47	01/26/23 14:31	1
Nitrobenzene-d5 (Surr)	55		37 - 147				01/25/23 12:47	01/26/23 14:31	1
Phenol-d5	81		30 - 153				01/25/23 12:47	01/26/23 14:31	1
Terphenyl-d14 (Surr)	106		42 - 157				01/25/23 12:47	01/26/23 14:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.38	J	1.2	0.23	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Arsenic	11		0.60	0.21	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Barium	56		0.60	0.069	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Beryllium	0.78		0.24	0.056	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Boron	6.8		3.0	0.28	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Cadmium	0.21		0.12	0.022	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Calcium	18000	B	12	2.0	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Chromium	15		0.60	0.30	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Cobalt	13		0.30	0.079	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Copper	23		0.60	0.17	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Iron	20000		12	6.3	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Lead	17		0.30	0.14	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Magnesium	14000	B	6.0	3.0	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Manganese	330		0.60	0.087	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Nickel	30		0.60	0.17	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Potassium	1600		30	11	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Selenium	0.43	J	0.60	0.35	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Silver	0.43		0.30	0.078	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Sodium	1900		60	8.9	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Thallium	<0.60		0.60	0.30	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Vanadium	19		0.30	0.071	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	1
Zinc	61		1.2	0.53	mg/Kg	☼	01/27/23 14:51	01/30/23 18:30	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		02/01/23 16:26	02/02/23 13:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/01/23 16:26	02/02/23 13:36	1
Chromium	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:36	1
Iron	<0.40		0.40	0.20	mg/L		02/01/23 16:26	02/02/23 13:36	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B12-1**

**Lab Sample ID: 500-228249-12**

Date Collected: 01/17/23 12:10

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 82.8

**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		02/01/23 16:26	02/02/23 13:36	1
<b>Manganese</b>	<b>0.078</b>		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:36	1
Nickel	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:36	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		02/01/23 16:27	02/02/23 15:19	1
<b>Barium</b>	<b>0.83</b>		0.50	0.050	mg/L		02/01/23 16:27	02/02/23 15:19	1
<b>Beryllium</b>	<b>0.016</b>		0.0040	0.0040	mg/L		02/01/23 16:27	02/02/23 15:19	1
<b>Boron</b>	<b>0.27</b>		0.10	0.050	mg/L		02/01/23 16:27	02/02/23 15:19	1
<b>Cadmium</b>	<b>0.0024</b>	J	0.0050	0.0020	mg/L		02/01/23 16:27	02/02/23 15:19	1
<b>Calcium</b>	<b>36</b>		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 15:19	1
<b>Chromium</b>	<b>0.30</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:19	1
<b>Cobalt</b>	<b>0.10</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:19	1
<b>Iron</b>	<b>330</b>		0.40	0.20	mg/L		02/01/23 16:27	02/02/23 15:19	1
<b>Lead</b>	<b>0.16</b>		0.0075	0.0075	mg/L		02/01/23 16:27	02/02/23 15:19	1
<b>Manganese</b>	<b>1.2</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:19	1
<b>Nickel</b>	<b>0.36</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:19	1
<b>Potassium</b>	<b>51</b>		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 15:19	1
Selenium	<0.050		0.050	0.020	mg/L		02/01/23 16:27	02/02/23 15:19	1
Silver	<0.025		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:19	1
<b>Zinc</b>	<b>0.81</b>		0.50	0.020	mg/L		02/01/23 16:27	02/02/23 15:19	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		02/01/23 16:26	02/03/23 12:48	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		02/01/23 16:27	02/03/23 11:49	1
<b>Thallium</b>	<b>0.0093</b>		0.0020	0.0020	mg/L		02/01/23 16:27	02/03/23 11:49	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		02/01/23 15:10	02/02/23 11:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.033</b>		0.018	0.0096	mg/Kg	✱	01/27/23 13:45	01/30/23 08:42	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.60		0.60	0.23	mg/Kg	✱	01/25/23 13:05	01/25/23 14:15	1
<b>pH (SW846 9045D)</b>	<b>8.4</b>		0.2	0.2	SU			01/24/23 21:19	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B14-1**

**Lab Sample ID: 500-228249-14**

Date Collected: 01/17/23 12:50

Matrix: Solid

Date Received: 01/18/23 11:25

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	<0.0015		0.0015	0.00050	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00048	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00064	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
1,1-Dichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
1,1-Dichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
1,2-Dichloroethane	<0.0037		0.0037	0.0012	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00052	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
2-Butanone (MEK)	<0.0037		0.0037	0.0017	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
2-Hexanone	<0.0037		0.0037	0.0012	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
4-Methyl-2-pentanone (MIBK)	<0.0037		0.0037	0.0011	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Acetone	<0.015	*+	0.015	0.0065	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Benzene	<0.0015		0.0015	0.00038	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Bromomethane	<0.0037		0.0037	0.0014	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Carbon disulfide	<0.0037		0.0037	0.00078	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Carbon tetrachloride	<0.0015		0.0015	0.00043	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Chlorobenzene	<0.0015		0.0015	0.00055	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Chloroethane	<0.0037		0.0037	0.0011	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Chloroform	<0.0015		0.0015	0.00052	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Chloromethane	<0.0037		0.0037	0.0015	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00045	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Dibromochloromethane	<0.0015		0.0015	0.00049	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Ethylbenzene	<0.0015		0.0015	0.00072	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00044	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Methylene Chloride	<0.0037		0.0037	0.0015	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Styrene	<0.0015		0.0015	0.00045	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Tetrachloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00066	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00052	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Vinyl chloride	<0.0015		0.0015	0.00066	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1
Xylenes, Total	<0.0030		0.0030	0.00048	mg/Kg	☼	01/18/23 18:32	01/27/23 11:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 134	01/18/23 18:32	01/27/23 11:15	1
4-Bromofluorobenzene (Surr)	87		75 - 131	01/18/23 18:32	01/27/23 11:15	1
Dibromofluoromethane	110		75 - 126	01/18/23 18:32	01/27/23 11:15	1
Toluene-d8 (Surr)	90		75 - 124	01/18/23 18:32	01/27/23 11:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	01/25/23 12:47	01/26/23 14:53	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	01/25/23 12:47	01/26/23 14:53	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	01/25/23 12:47	01/26/23 14:53	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	01/25/23 12:47	01/26/23 14:53	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	01/25/23 12:47	01/26/23 14:53	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B14-1**

**Lab Sample ID: 500-228249-14**

**Date Collected: 01/17/23 12:50**

**Matrix: Solid**

**Date Received: 01/18/23 11:25**

**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	<0.36		0.36	0.083	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
2-Methylnaphthalene	<0.073		0.073	0.0067	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
2-Nitrophenol	<0.36		0.36	0.086	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
4-Nitrophenol	<0.73		0.73	0.35	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Anthracene	<0.036		0.036	0.0061	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Benzo[b]fluoranthene	<0.036		0.036	0.0079	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Bis(2-chloroethyl)ether	<0.18	+	0.18	0.055	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Carbazole	<0.18		0.18	0.091	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Chrysene	<0.036		0.036	0.0099	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Fluoranthene	<0.036		0.036	0.0067	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	✱	01/25/23 12:47	01/26/23 14:53	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B14-1**

**Lab Sample ID: 500-228249-14**

Date Collected: 01/17/23 12:50

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 88.3

**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	<0.036	*+	0.036	0.0094	mg/Kg	✳	01/25/23 12:47	01/26/23 14:53	1
Isophorone	<0.18		0.18	0.041	mg/Kg	✳	01/25/23 12:47	01/26/23 14:53	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	✳	01/25/23 12:47	01/26/23 14:53	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	✳	01/25/23 12:47	01/26/23 14:53	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	✳	01/25/23 12:47	01/26/23 14:53	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	✳	01/25/23 12:47	01/26/23 14:53	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	✳	01/25/23 12:47	01/26/23 14:53	1
Phenanthrene	<0.036		0.036	0.0051	mg/Kg	✳	01/25/23 12:47	01/26/23 14:53	1
Phenol	<0.18		0.18	0.081	mg/Kg	✳	01/25/23 12:47	01/26/23 14:53	1
Pyrene	<0.036		0.036	0.0072	mg/Kg	✳	01/25/23 12:47	01/26/23 14:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	66		31 - 143				01/25/23 12:47	01/26/23 14:53	1
2-Fluorobiphenyl	66		43 - 145				01/25/23 12:47	01/26/23 14:53	1
2-Fluorophenol	79		31 - 166				01/25/23 12:47	01/26/23 14:53	1
Nitrobenzene-d5 (Surr)	53		37 - 147				01/25/23 12:47	01/26/23 14:53	1
Phenol-d5	75		30 - 153				01/25/23 12:47	01/26/23 14:53	1
Terphenyl-d14 (Surr)	96		42 - 157				01/25/23 12:47	01/26/23 14:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.23</b>	<b>J</b>	1.1	0.22	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Arsenic</b>	<b>6.2</b>		0.56	0.19	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Barium</b>	<b>34</b>		0.56	0.064	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Beryllium</b>	<b>0.57</b>		0.23	0.053	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Boron</b>	<b>5.6</b>		2.8	0.26	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Cadmium</b>	<b>0.13</b>		0.11	0.020	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Calcium</b>	<b>46000</b>	<b>B</b>	23	3.8	mg/Kg	✳	01/27/23 14:51	01/31/23 15:29	2
<b>Chromium</b>	<b>11</b>		0.56	0.28	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Cobalt</b>	<b>7.3</b>		0.28	0.074	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Copper</b>	<b>21</b>		0.56	0.16	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Iron</b>	<b>16000</b>		11	5.9	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Lead</b>	<b>10</b>		0.28	0.13	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Magnesium</b>	<b>26000</b>	<b>B</b>	5.6	2.8	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Manganese</b>	<b>150</b>		0.56	0.082	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Nickel</b>	<b>22</b>		0.56	0.16	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Potassium</b>	<b>1200</b>		28	10	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
Selenium	<0.56		0.56	0.33	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Silver</b>	<b>0.28</b>		0.28	0.073	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Sodium</b>	<b>1700</b>		56	8.4	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
Thallium	<0.56		0.56	0.28	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Vanadium</b>	<b>14</b>		0.28	0.067	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	1
<b>Zinc</b>	<b>46</b>		1.1	0.50	mg/Kg	✳	01/27/23 14:51	01/30/23 18:43	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		02/01/23 16:26	02/02/23 13:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/01/23 16:26	02/02/23 13:49	1
Chromium	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:49	1
Iron	<0.40		0.40	0.20	mg/L		02/01/23 16:26	02/02/23 13:49	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B14-1**

**Lab Sample ID: 500-228249-14**

Date Collected: 01/17/23 12:50

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 88.3

**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		02/01/23 16:26	02/02/23 13:49	1
<b>Manganese</b>	<b>0.38</b>		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:49	1
Nickel	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.068</b>		0.050	0.010	mg/L		02/01/23 16:27	02/02/23 15:25	1
<b>Barium</b>	<b>0.36</b>	J	0.50	0.050	mg/L		02/01/23 16:27	02/02/23 15:25	1
<b>Beryllium</b>	<b>0.0070</b>		0.0040	0.0040	mg/L		02/01/23 16:27	02/02/23 15:25	1
<b>Boron</b>	<b>0.16</b>		0.10	0.050	mg/L		02/01/23 16:27	02/02/23 15:25	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/01/23 16:27	02/02/23 15:25	1
<b>Calcium</b>	<b>17</b>		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 15:25	1
<b>Chromium</b>	<b>0.14</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:25	1
<b>Cobalt</b>	<b>0.050</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:25	1
<b>Iron</b>	<b>160</b>		0.40	0.20	mg/L		02/01/23 16:27	02/02/23 15:25	1
<b>Lead</b>	<b>0.063</b>		0.0075	0.0075	mg/L		02/01/23 16:27	02/02/23 15:25	1
<b>Manganese</b>	<b>0.54</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:25	1
<b>Nickel</b>	<b>0.17</b>		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:25	1
<b>Potassium</b>	<b>24</b>		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 15:25	1
Selenium	<0.050		0.050	0.020	mg/L		02/01/23 16:27	02/02/23 15:25	1
Silver	<0.025		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:25	1
<b>Zinc</b>	<b>0.37</b>	J	0.50	0.020	mg/L		02/01/23 16:27	02/02/23 15:25	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		02/01/23 16:26	02/03/23 12:52	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		02/01/23 16:27	02/03/23 11:54	1
<b>Thallium</b>	<b>0.0051</b>		0.0020	0.0020	mg/L		02/01/23 16:27	02/03/23 11:54	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		02/01/23 15:10	02/02/23 11:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.020</b>		0.017	0.0092	mg/Kg	✱	01/27/23 13:45	01/30/23 08:46	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.22</b>	J	0.57	0.22	mg/Kg	✱	01/25/23 13:07	01/25/23 14:22	1
<b>pH (SW846 9045D)</b>	<b>8.1</b>		0.2	0.2	SU			01/24/23 21:24	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B15-1**

**Lab Sample ID: 500-228249-15**

**Date Collected: 01/17/23 13:00**

**Matrix: Solid**

**Date Received: 01/18/23 11:25**

**Percent Solids: 83.6**

**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	☼	01/18/23 18:32	01/26/23 12:55	1
1,1,2,2-Tetrachloroethane	<0.0019		0.0019	0.00060	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
1,1,2-Trichloroethane	<0.0019		0.0019	0.00080	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
1,1-Dichloroethane	<0.0019		0.0019	0.00064	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
1,1-Dichloroethene	<0.0019		0.0019	0.00064	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
1,2-Dichloroethane	<0.0047		0.0047	0.0015	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
1,2-Dichloropropane	<0.0019		0.0019	0.00048	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
1,3-Dichloropropene, Total	<0.0019		0.0019	0.00065	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
2-Butanone (MEK)	<0.0047		0.0047	0.0021	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
2-Hexanone	<0.0047		0.0047	0.0015	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0014	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Acetone	<0.019		0.019	0.0081	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Benzene	<0.0019		0.0019	0.00048	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Bromodichloromethane	<0.0019		0.0019	0.00038	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Bromoform	<0.0019		0.0019	0.00054	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Bromomethane	<0.0047		0.0047	0.0018	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Carbon disulfide	<0.0047		0.0047	0.00097	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Carbon tetrachloride	<0.0019		0.0019	0.00054	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Chlorobenzene	<0.0019		0.0019	0.00069	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Chloroethane	<0.0047	+	0.0047	0.0014	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Chloroform	<0.0019		0.0019	0.00065	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Chloromethane	<0.0047		0.0047	0.0019	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
cis-1,2-Dichloroethene	<0.0019		0.0019	0.00052	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
cis-1,3-Dichloropropene	<0.0019	-	0.0019	0.00056	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Dibromochloromethane	<0.0019		0.0019	0.00061	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Ethylbenzene	<0.0019		0.0019	0.00089	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Methyl tert-butyl ether	<0.0019		0.0019	0.00055	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Methylene Chloride	<0.0047		0.0047	0.0018	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Styrene	<0.0019		0.0019	0.00056	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Tetrachloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Toluene	<0.0019		0.0019	0.00047	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
trans-1,2-Dichloroethene	<0.0019		0.0019	0.00083	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
trans-1,3-Dichloropropene	<0.0019		0.0019	0.00065	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Trichloroethene	<0.0019		0.0019	0.00063	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Vinyl chloride	<0.0019		0.0019	0.00082	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1
Xylenes, Total	<0.0037		0.0037	0.00060	mg/Kg	☼	01/18/23 18:32	01/26/23 12:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 134	01/18/23 18:32	01/26/23 12:55	1
4-Bromofluorobenzene (Surr)	88		75 - 131	01/18/23 18:32	01/26/23 12:55	1
Dibromofluoromethane	112		75 - 126	01/18/23 18:32	01/26/23 12:55	1
Toluene-d8 (Surr)	89		75 - 124	01/18/23 18:32	01/26/23 12:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	01/25/23 12:47	01/26/23 16:18	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	01/25/23 12:47	01/26/23 16:18	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	01/25/23 12:47	01/26/23 16:18	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	01/25/23 12:47	01/26/23 16:18	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	01/25/23 12:47	01/26/23 16:18	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B15-1**

**Lab Sample ID: 500-228249-15**

Date Collected: 01/17/23 13:00

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 83.6

**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	0.085	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
<b>Acenaphthylene</b>	<b>0.0063</b>	<b>J</b>	0.037	0.0049	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
<b>Benzo[a]anthracene</b>	<b>0.019</b>	<b>J</b>	0.037	0.0050	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
<b>Benzo[a]pyrene</b>	<b>0.033</b>	<b>J</b>	0.037	0.0072	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
<b>Benzo[b]fluoranthene</b>	<b>0.041</b>		0.037	0.0080	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
<b>Benzo[g,h,i]perylene</b>	<b>0.016</b>	<b>J</b>	0.037	0.012	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
<b>Benzo[k]fluoranthene</b>	<b>0.014</b>	<b>J</b>	0.037	0.011	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Bis(2-chloroethyl)ether	<0.19	+	0.19	0.056	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Carbazole	<0.19		0.19	0.093	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
<b>Chrysene</b>	<b>0.024</b>	<b>J</b>	0.037	0.010	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
<b>Dibenz(a,h)anthracene</b>	<b>0.0077</b>	<b>J</b>	0.037	0.0072	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
<b>Fluoranthene</b>	<b>0.030</b>	<b>J</b>	0.037	0.0069	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	✱	01/25/23 12:47	01/26/23 16:18	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B15-1**

**Lab Sample ID: 500-228249-15**

Date Collected: 01/17/23 13:00

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 83.6

**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>0.018</b>	<b>J**</b>	0.037	0.0097	mg/Kg	☼	01/25/23 12:47	01/26/23 16:18	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	01/25/23 12:47	01/26/23 16:18	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	01/25/23 12:47	01/26/23 16:18	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	☼	01/25/23 12:47	01/26/23 16:18	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	☼	01/25/23 12:47	01/26/23 16:18	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	01/25/23 12:47	01/26/23 16:18	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	☼	01/25/23 12:47	01/26/23 16:18	1
<b>Phenanthrene</b>	<b>0.012</b>	<b>J</b>	0.037	0.0052	mg/Kg	☼	01/25/23 12:47	01/26/23 16:18	1
Phenol	<0.19		0.19	0.083	mg/Kg	☼	01/25/23 12:47	01/26/23 16:18	1
<b>Pyrene</b>	<b>0.029</b>	<b>J</b>	0.037	0.0074	mg/Kg	☼	01/25/23 12:47	01/26/23 16:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	73		31 - 143				01/25/23 12:47	01/26/23 16:18	1
2-Fluorobiphenyl	79		43 - 145				01/25/23 12:47	01/26/23 16:18	1
2-Fluorophenol	96		31 - 166				01/25/23 12:47	01/26/23 16:18	1
Nitrobenzene-d5 (Surr)	62		37 - 147				01/25/23 12:47	01/26/23 16:18	1
Phenol-d5	87		30 - 153				01/25/23 12:47	01/26/23 16:18	1
Terphenyl-d14 (Surr)	118		42 - 157				01/25/23 12:47	01/26/23 16:18	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	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Arsenic</b>	<b>4.4</b>		0.58	0.20	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Barium</b>	<b>53</b>		2.9	0.33	mg/Kg	☼	01/27/23 14:51	01/31/23 15:33	5
<b>Beryllium</b>	<b>0.46</b>		0.23	0.055	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Boron</b>	<b>6.8</b>		2.9	0.27	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Cadmium</b>	<b>0.18</b>		0.12	0.021	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Calcium</b>	<b>130000</b>	<b>B</b>	58	9.9	mg/Kg	☼	01/27/23 14:51	01/31/23 15:33	5
<b>Chromium</b>	<b>8.1</b>		0.58	0.29	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Cobalt</b>	<b>5.0</b>		0.29	0.077	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Copper</b>	<b>7.8</b>		0.58	0.16	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Iron</b>	<b>11000</b>		58	30	mg/Kg	☼	01/27/23 14:51	01/31/23 15:33	5
<b>Lead</b>	<b>10</b>		0.29	0.14	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Magnesium</b>	<b>81000</b>	<b>B</b>	29	15	mg/Kg	☼	01/27/23 14:51	01/31/23 15:33	5
<b>Manganese</b>	<b>160</b>		0.58	0.085	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Nickel</b>	<b>11</b>		0.58	0.17	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Potassium</b>	<b>880</b>		29	10	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
Selenium	<0.58		0.58	0.34	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Silver</b>	<b>0.20</b>	<b>J</b>	0.29	0.075	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Sodium</b>	<b>1300</b>		58	8.7	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Thallium</b>	<b>0.44</b>	<b>J</b>	0.58	0.29	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Vanadium</b>	<b>14</b>		0.29	0.069	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	1
<b>Zinc</b>	<b>29</b>		1.2	0.51	mg/Kg	☼	01/27/23 14:51	01/30/23 18:46	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		02/01/23 16:26	02/02/23 13:52	1
Chromium	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:52	1
Iron	<0.40		0.40	0.20	mg/L		02/01/23 16:26	02/02/23 13:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/01/23 16:26	02/02/23 13:52	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

**Client Sample ID: 2852V-46-B15-1**

**Lab Sample ID: 500-228249-15**

Date Collected: 01/17/23 13:00

Matrix: Solid

Date Received: 01/18/23 11:25

Percent Solids: 83.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.65		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:52	1
Nickel	<0.025		0.025	0.010	mg/L		02/01/23 16:26	02/02/23 13:52	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		02/01/23 16:27	02/02/23 15:29	1
Barium	0.64		0.50	0.050	mg/L		02/01/23 16:27	02/02/23 15:29	1
Beryllium	0.0056		0.0040	0.0040	mg/L		02/01/23 16:27	02/02/23 15:29	1
Boron	0.13		0.10	0.050	mg/L		02/01/23 16:27	02/02/23 15:29	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/01/23 16:27	02/02/23 15:29	1
Calcium	34		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 15:29	1
Chromium	0.13		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:29	1
Cobalt	0.038		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:29	1
Iron	91		0.40	0.20	mg/L		02/01/23 16:27	02/02/23 15:29	1
Lead	0.077		0.0075	0.0075	mg/L		02/01/23 16:27	02/02/23 15:29	1
Manganese	0.62		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:29	1
Nickel	0.12		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:29	1
Potassium	17		2.5	0.50	mg/L		02/01/23 16:27	02/02/23 15:29	1
Selenium	<0.050		0.050	0.020	mg/L		02/01/23 16:27	02/02/23 15:29	1
Silver	<0.025		0.025	0.010	mg/L		02/01/23 16:27	02/02/23 15:29	1
Zinc	0.35	J	0.50	0.020	mg/L		02/01/23 16:27	02/02/23 15:29	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		02/01/23 16:26	02/03/23 12:58	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		02/01/23 16:27	02/03/23 11:56	1
Thallium	0.0027		0.0020	0.0020	mg/L		02/01/23 16:27	02/03/23 11:56	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		02/01/23 15:10	02/02/23 11:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.019	0.0098	mg/Kg	☆	01/27/23 13:45	01/30/23 08:48	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.24	J	0.60	0.23	mg/Kg	☆	01/25/23 13:08	01/25/23 14:24	1
pH (SW846 9045D)	9.0		0.2	0.2	SU			01/24/23 21:26	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

## Qualifiers

### GC/MS VOA

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

### 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, low biased.

### Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL, and the absolute difference between results is < the upper reporting limits for both.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

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

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228249-1

## 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 - AE8-007

Job ID: 500-228249-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	12-31-23



**CHAIN OF CUSTODY RECORD**

500-228249

<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	500-228249 COC		Project Name <u>AEB-07A</u>	COC No <u># 2</u> of <u>2</u>
	Lab <del>TekLab, Inc.</del> <u>Eurofins</u>	Project No <u>PTB/WU, 145-002/07A</u>		Lab Job No.
	Address <u>5445 Horseshoe Lake Road</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		Sample Temp <u>2.9-2.0/3.1-3.2</u>
	Collinsville, IL 62234	Sampler: <u>N. Coiv / M. Furman</u>		Matrix Key:
	Phone <u>877-344-1003</u>			W Water S Soil SL Sludge S Sediment L Leachate DW Drinking Water OL Oil O Other
Contact <u>Shelly Hennessy</u>	email <u>shennessy@teklabinc.com</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												
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	2852V-46-B02-1	1/17	0900	S	X	X					X	X	X	X	X		No B02-2
2	2852V-46-B04-1		0920	S	X	X					X	X	X	X	X		No B04-2
3	2852V-46-B03		0940	S	X	X					X	X	X	X	X		
4	2852V-46-B05		1000	S	X	X					X	X	X	X	X		
5	2852V-46-B06-1		1030	S	X	X					X	X	X	X	X		No B06-2
6	2852V-46-B07		1050	S	X	X					X	X	X	X	X		
7	2852V-46-B08-1		1110	S	X	X					X	X	X	X	X		No B08-2
8	2852V-46-B09		1130	S	X	X					X	X	X	X	X		
9	2852V-46-B10-1		1140	S	X	X					X	X	X	X	X		No B10-2
10	2852V-46-BU		1150	S	X	X					X	X	X	X	X		
11	2852V-46-BU DUP		1200	S	X	X					X	X	X	X	X		
12	2852V-46-B12-1		1210	S	X	X					X	X	X	X	X		No B12-2

Relinquished by <u>M. Coiv</u>	Date/Time <u>1/18/22 10:35</u>	Received by <u>M. Furman</u>	Date/Time <u>1/18/22 10:35</u>
Relinquished by <u>M. Furman</u>	Date/Time <u>1/19/23 11:25</u>	Received by <u>M. Furman</u>	Date/Time <u>1-18-23 11:25</u>
Relinquished by	Date/Time	Received by	Date/Time



## CHAIN OF CUSTODY RECORD

500-228249

<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 <del>Tek</del> <i>Lab, Inc. Eutofins</i> Address <del>5445 Horseshoe Lake Road</del> <del>Collinsville, IL 62234</del> Phone <del>877-344-1003</del> Contact <del>Shelly Hennessy</del> email <del>shennessy@teklab.com</del>	Project Name <u>AEB-007A</u> Project No <u>PTB/wc 145-002/07A</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>N. Cicio / M. Furman</u>	COC No <u>2</u> of <u>2</u> Lab Job No _____ Sample Temp <u>3.1 - 2.9-2.0 / 2.2</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**

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			
13	2852v-46-B13	1/17	1220	S	X	X					X	X	X	X	X				
14	2852v-46-B14-1	↓	1250	S	X	X					X	X	X	X	X				NO B14-2
15	2852v-46-B15-1	↓	1300	S	X	X					X	X	X	X	X				NO B15-2
16	2852v-46-B16	↓	1310	S	X	X					X	X	X	X	X				
	<del>2852v-46</del>			S	X	X					X	X	X	X	X				
17	Trip Blank #3				X														

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

Relinquished by <i>Min</i>	Date/Time <u>1/18/22 10:35</u>	Received by <i>Shelly Hennessy</i>	Date/Time <u>1/18/22 10:35</u>
Relinquished by <i>Shelly Hennessy</i>	Date/Time <u>1/18/23 1125</u>	Received by <i>M. Furman</i>	Date/Time <u>1-18-23 1/25</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

3.3/3.2 Chain of Custody Record



<b>Client Information (Sub Contract Lab)</b>				Sampler: Wright, Richard		Lab PM: Wright, Richard		Carrier Tracking No(s):		COC No: 500-169895.1											
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 #: 500-228249-1												
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: 1/31/2023		<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 - AE8-007, Site:				TAT Requested (days):										PO #:		WO #:		Project #: 50021033, SSOW#:			
<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)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		9012B/9012B_Prep Cyanide, Total		Total Number of containers		Special Instructions/Note:  <b>E176</b>	
2852V-46-B02-1 (500-228249-1)				1/17/23		09:00 Central		Solid				X								1	
2852V-46-B04-1 (500-228249-2)				1/17/23		09:20 Central		Solid				X								1	
2852V-46-B03 (500-228249-3)				1/17/23		09:40 Central		Solid				X								1	
2852V-46-B05 (500-228249-4)				1/17/23		10:00 Central		Solid				X								1	
2852V-46-B06-1 (500-228249-5)				1/17/23		10:30 Central		Solid				X								1	
2852V-46-B07 (500-228249-6)				1/17/23		10:50 Central		Solid				X								1	
2852V-46-B08-1 (500-228249-7)				1/17/23		11:10 Central		Solid				X								1	
2852V-46-B09 (500-228249-8)				1/17/23		11:30 Central		Solid				X								1	
2852V-46-B10-1 (500-228249-9)				1/17/23		11:40 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)				Primary Deliverable Rank: 1		Special Instructions/QC Requirements:															
Empty Kit Relinquished by:				Date:		Time:		Method of Shipment:													
Relinquished by: <i>Korale Zawal</i>				Date/Time: 1/18/23 15:35		Company:		Received by: <i>Donelle H...</i>													
Relinquished by:				Date/Time:		Company:		Received by:													
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 146 of 149

2/3/2023



**Eurofins Chicago**

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

**Chain of Custody Record**



Environment Testing

<b>Client Information (Sub Contract Lab)</b>				Sampler:		Lab PM: Wright, Richard				Carrier Tracking No(s):				COC No: 500-169895.2							
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 #: 500-228249-1									
Address: 180 S. Van Buren Avenue,				Due Date Requested: 1/31/2023		<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)							
City: Barberton				TAT Requested (days):																	
State, Zip: OH, 44203				PO #:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		9012B/9012B_Prep Cyanide, Total		Total Number of containers		E 176							
Phone: 330-497-9396(Tel) 330-497-0772(Fax)				WO #:																	
Email:				Project #: 50021033		Special Instructions/Note:															
Project Name: IDOT - AE8-007				SSOW#:																	
Site:																					
<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>MATRIX (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)</b>		<b>Field Filtered Sample (Yes or No)</b>		<b>Perform MS/MSD (Yes or No)</b>		<b>9012B/9012B_Prep Cyanide, Total</b>		<b>Total Number of containers</b>		<b>Special Instructions/Note:</b>	
								<b>Preservation Code:</b>													
2852V-46-B11 (500-228249-10)				1/17/23		11:50 Central		Solid		Solid		X						1			
2852V-46-B11 DUP (500-228249-11)				1/17/23		12:00 Central		Solid		Solid		X						1			
2852V-46-B12-1 (500-228249-12)				1/17/23		12:10 Central		Solid		Solid		X						1			
2852V-46-B13 (500-228249-13)				1/17/23		12:20 Central		Solid		Solid		X						1			
2852V-46-B14-1 (500-228249-14)				1/17/23		12:50 Central		Solid		Solid		X						1			
2852V-46-B15-1 (500-228249-15)				1/17/23		13:00 Central		Solid		Solid		X						1			
2852V-46-B16 (500-228249-16)				1/17/23		13:10 Central		Solid		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)				Primary Deliverable Rank: 1				Special Instructions/QC Requirements:			

Empty Kit Relinquished by:				Date:				Time:				Method of Shipment:											
Relinquished by: <i>Michael Zwick</i>				Date/Time: 1/18/23 15:35				Company:				Received by: <i>Roselle Hancock</i>				Date/Time: 1/19/23 9:35				Company: ESTX			
Relinquished by:				Date/Time:				Company:				Received by:				Date/Time:				Company:			
Relinquished by:				Date/Time:				Company:				Received by:				Date/Time:				Company:			
Custody Seals Intact: Δ Yes Δ No				Custody Seal No.:				Cooler Temperature(s) °C and Other Remarks:															

Page 147 of 149

2/3/2023





# 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 1488 (47th Street) Office Phone Number, if available: \_\_\_\_\_

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

9101 West 47th Street (southeast quadrant of 47th Street and East Avenue)

City: McCook State: IL Zip Code: 60525

County: Cook Township: Lyons

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

Latitude: 41.80535 Longitude: - 87.85154

(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS  Map Interpolation  Photo Interpolation  Survey  Other

Additional BOL: 0310060006, 0311740010, 0311535102, 0311535103, 0311535096, 0311745053, 0311745015

IEPA Site Number(s), if assigned: BOL: 0311745012 BOW: \_\_\_\_\_ BOA: \_\_\_\_\_

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

Estimated Volume of debris (cu. Yd.): 7,209

### 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 2852V-47-B01, 2852V-47-B02, 2852V-47-B03, 2852V-47-B04 AND 2852V-47-B07 WERE SAMPLED ADJACENT TO SITE 2852V-47. SEE TABLE 3ai AND FIGURES 4, 8, 9 AND 10 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 NUMBERS: 500-228081-1 AND 500-228412-1.

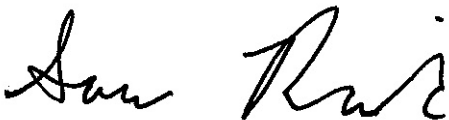
**IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist**

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 5, 2023  
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
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl acetate
Vinyl chloride
Xylenes, total
<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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

**ANALYTICAL PARAMETERS**

<b>Semivolatile Organic Compounds (mg/kg)</b>
2,4-Dinitrophenol
2,4-Dinitrotoluene
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

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

**ANALYTICAL PARAMETERS**

<b>Semivolatile Organic Compounds (mg/kg)</b>
Hexachloroethane
Indeno(1,2,3-cd)pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
<b>Polychlorinated Biphenyls (mg/kg)</b>
Aroclor 1016
Aroclor 1221
Aroclor 1232
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260
Polychlorinated biphenyls (PCBs)
<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



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

***ANALYTICAL PARAMETERS***

<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 2852V-47  
Hanson Material  
Service Federal Quarry

Sample ID	2852V-47-B01-1	2852V-47-B01-2	2852V-47-B02-1	2852V-47-B02-2	2852V-47-B03-1	Maximum Allowable Concentration								
Sample Depth (ft)	0-6	6-12	0-6.5	6.5-11	0-7.5	<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	1/13/2023	1/13/2023	1/13/2023	1/13/2023	1/13/2023									
PID	0	0	0	0	0									
Sample pH	7.9	7.8	8.1	8.5	8.1									
Matrix	Soil	Soil	Soil	Soil	Soil									
<b>Inorganic Compounds, Total (mg/kg)</b>														
Arsenic	12	1,3	12	1,3	12	1,3	6.1	13	1,3	11.3	--	11.3	--	13

Sample ID	2852V-47-B03-2	2852V-47-B04-1	2852V-47-B07	Maximum Allowable Concentration				
Sample Depth (ft)	7.5-11	0-6	0-7.5	<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	1/13/2023	1/19/2023	1/19/2023					
PID	0	0	0					
Sample pH	8.4	8.2	8					
Matrix	Soil	Soil	Soil					
<b>Inorganic Compounds, Total (mg/kg)</b>								
Arsenic	3.6	7.4	8.6	11.3	--	11.3	--	13



# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 1/30/2023 4:46:40 PM

## JOB DESCRIPTION

IDOT - AE8-007

## JOB NUMBER

500-228081-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
1/30/2023 4:46:40 PM

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B01-1**

**Lab Sample ID: 500-228081-1**

Date Collected: 01/13/23 12:10

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Acetone	<0.016		0.016	0.0071	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Benzene	<0.0016		0.0016	0.00041	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Chloroform	<0.0016		0.0016	0.00056	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00045	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Methylene Chloride	<0.0041	+	0.0041	0.0016	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Tetrachloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	☼	01/13/23 17:33	01/20/23 17:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	01/13/23 17:33	01/20/23 17:21	1
4-Bromofluorobenzene (Surr)	95		75 - 131	01/13/23 17:33	01/20/23 17:21	1
Dibromofluoromethane	84		75 - 126	01/13/23 17:33	01/20/23 17:21	1
Toluene-d8 (Surr)	92		75 - 124	01/13/23 17:33	01/20/23 17:21	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	☼	01/19/23 13:31	01/23/23 15:37	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	01/19/23 13:31	01/23/23 15:37	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	01/19/23 13:31	01/23/23 15:37	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	01/19/23 13:31	01/23/23 15:37	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	01/19/23 13:31	01/23/23 15:37	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B01-1**

**Lab Sample ID: 500-228081-1**

**Date Collected: 01/13/23 12:10**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**Percent Solids: 87.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
2,4-Dichlorophenol	<0.36		0.36	0.085	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
2-Methylnaphthalene	<0.072		0.072	0.0066	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Acenaphthene	<0.036		0.036	0.0064	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Acenaphthylene	<0.036		0.036	0.0047	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
<b>Benzo[a]anthracene</b>	<b>0.0054</b>	<b>J</b>	0.036	0.0048	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
<b>Benzo[a]pyrene</b>	<b>0.015</b>	<b>J</b>	0.036	0.0069	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
<b>Benzo[b]fluoranthene</b>	<b>0.018</b>	<b>J</b>	0.036	0.0077	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Carbazole	<0.18		0.18	0.089	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
<b>Chrysene</b>	<b>0.011</b>	<b>J</b>	0.036	0.0098	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0069	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
<b>Fluoranthene</b>	<b>0.012</b>	<b>J</b>	0.036	0.0066	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Fluorene	<0.036		0.036	0.0050	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	✳	01/19/23 13:31	01/23/23 15:37	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B01-1**

**Lab Sample ID: 500-228081-1**

Date Collected: 01/13/23 12:10

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 87.2

**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>0.0096</b>	<b>J</b>	0.036	0.0093	mg/Kg	☼	01/19/23 13:31	01/23/23 15:37	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	01/19/23 13:31	01/23/23 15:37	1
Naphthalene	<0.036		0.036	0.0055	mg/Kg	☼	01/19/23 13:31	01/23/23 15:37	1
Nitrobenzene	<0.036		0.036	0.0089	mg/Kg	☼	01/19/23 13:31	01/23/23 15:37	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	01/19/23 13:31	01/23/23 15:37	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	01/19/23 13:31	01/23/23 15:37	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	01/19/23 13:31	01/23/23 15:37	1
Phenanthrene	<0.036		0.036	0.0050	mg/Kg	☼	01/19/23 13:31	01/23/23 15:37	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	01/19/23 13:31	01/23/23 15:37	1
<b>Pyrene</b>	<b>0.012</b>	<b>J</b>	0.036	0.0071	mg/Kg	☼	01/19/23 13:31	01/23/23 15:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	62		31 - 143	01/19/23 13:31	01/23/23 15:37	1
2-Fluorobiphenyl	62		43 - 145	01/19/23 13:31	01/23/23 15:37	1
2-Fluorophenol	77		31 - 166	01/19/23 13:31	01/23/23 15:37	1
Nitrobenzene-d5 (Surr)	53		37 - 147	01/19/23 13:31	01/23/23 15:37	1
Phenol-d5	75		30 - 153	01/19/23 13:31	01/23/23 15:37	1
Terphenyl-d14 (Surr)	74		42 - 157	01/19/23 13:31	01/23/23 15:37	1

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.019		0.019	0.0074	mg/Kg	☼	01/24/23 08:53	01/26/23 13:08	1
PCB-1221	<0.019		0.019	0.0074	mg/Kg	☼	01/24/23 08:53	01/26/23 13:08	1
PCB-1232	<0.019		0.019	0.0051	mg/Kg	☼	01/24/23 08:53	01/26/23 13:08	1
PCB-1242	<0.019		0.019	0.0073	mg/Kg	☼	01/24/23 08:53	01/26/23 13:08	1
PCB-1248	<0.019		0.019	0.0089	mg/Kg	☼	01/24/23 08:53	01/26/23 13:08	1
PCB-1254	<0.019		0.019	0.0064	mg/Kg	☼	01/24/23 08:53	01/26/23 13:08	1
PCB-1260	<0.019		0.019	0.0071	mg/Kg	☼	01/24/23 08:53	01/26/23 13:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	81		49 - 129	01/24/23 08:53	01/26/23 13:08	1
DCB Decachlorobiphenyl	96		37 - 121	01/24/23 08:53	01/26/23 13:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.62</b>	<b>J</b>	1.1	0.21	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
<b>Arsenic</b>	<b>12</b>		0.54	0.19	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
<b>Barium</b>	<b>51</b>		2.7	0.31	mg/Kg	☼	01/20/23 09:30	01/24/23 20:41	5
<b>Beryllium</b>	<b>0.61</b>		0.22	0.051	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
<b>Boron</b>	<b>9.4</b>		2.7	0.25	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
<b>Cadmium</b>	<b>0.22</b>		0.11	0.019	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
<b>Calcium</b>	<b>69000</b>		54	9.2	mg/Kg	☼	01/20/23 09:30	01/24/23 20:41	5
<b>Chromium</b>	<b>12</b>		0.54	0.27	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
<b>Cobalt</b>	<b>11</b>	<b>^1+</b>	0.27	0.071	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
<b>Copper</b>	<b>26</b>		0.54	0.15	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
<b>Iron</b>	<b>23000</b>	<b>B</b>	54	28	mg/Kg	☼	01/20/23 09:30	01/24/23 20:41	5
<b>Lead</b>	<b>17</b>		0.27	0.12	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
<b>Magnesium</b>	<b>43000</b>		27	13	mg/Kg	☼	01/20/23 09:30	01/24/23 20:41	5
<b>Manganese</b>	<b>440</b>		0.54	0.078	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
<b>Nickel</b>	<b>28</b>		0.54	0.16	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B01-1**

**Lab Sample ID: 500-228081-1**

Date Collected: 01/13/23 12:10

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	1800		27	9.6	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
Selenium	0.50	J	0.54	0.32	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
Silver	0.30		0.27	0.070	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
Sodium	360		54	8.0	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
Vanadium	16		0.27	0.064	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	1
Zinc	66		1.1	0.47	mg/Kg	☼	01/20/23 09:30	01/24/23 00:11	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		01/26/23 17:59	01/27/23 15:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/26/23 17:59	01/27/23 15:00	1
Chromium	<0.025		0.025	0.010	mg/L		01/26/23 17:59	01/27/23 15:00	1
Iron	<0.40		0.40	0.20	mg/L		01/26/23 17:59	01/27/23 15:00	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/26/23 17:59	01/27/23 15:00	1
Manganese	0.83		0.025	0.010	mg/L		01/26/23 17:59	01/27/23 15:00	1
Nickel	<0.025		0.025	0.010	mg/L		01/26/23 17:59	01/27/23 15:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.085		0.050	0.010	mg/L		01/27/23 17:01	01/28/23 17:33	1
Barium	0.30	J	0.50	0.050	mg/L		01/27/23 17:01	01/28/23 17:33	1
Beryllium	0.0070		0.0040	0.0040	mg/L		01/27/23 17:01	01/28/23 17:33	1
Boron	0.15		0.10	0.050	mg/L		01/27/23 17:01	01/28/23 17:33	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/27/23 17:01	01/28/23 17:33	1
Calcium	20		2.5	0.50	mg/L		01/27/23 17:01	01/28/23 17:33	1
Chromium	0.12		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:33	1
Cobalt	0.060		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:33	1
Iron	170		0.40	0.20	mg/L		01/27/23 17:01	01/28/23 17:33	1
Lead	0.13		0.0075	0.0075	mg/L		01/27/23 17:01	01/28/23 17:33	1
Manganese	0.45		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:33	1
Nickel	0.18		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:33	1
Potassium	26		2.5	0.50	mg/L		01/27/23 17:01	01/28/23 17:33	1
Selenium	<0.050		0.050	0.020	mg/L		01/27/23 17:01	01/28/23 17:33	1
Silver	<0.025		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:33	1
Zinc	0.48	J	0.50	0.020	mg/L		01/27/23 17:01	01/28/23 17:33	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		01/26/23 17:59	01/30/23 12:17	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		01/27/23 17:01	01/30/23 11:30	1
Thallium	0.0058		0.0020	0.0020	mg/L		01/27/23 17:01	01/30/23 11:30	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		01/27/23 15:30	01/30/23 07:32	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B01-1**

**Lab Sample ID: 500-228081-1**

Date Collected: 01/13/23 12:10

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034		0.018	0.0096	mg/Kg	☆	01/23/23 16:30	01/24/23 10:05	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.60		0.60	0.23	mg/Kg	☆	01/19/23 11:43	01/19/23 12:52	1
pH (SW846 9045D)	7.9		0.2	0.2	SU			01/19/23 19:55	1



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B01-2**

**Lab Sample ID: 500-228081-2**

Date Collected: 01/13/23 12:20

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00066	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
1,1-Dichloroethene	<0.0015		0.0015	0.00053	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
1,2-Dichloropropane	<0.0015		0.0015	0.00040	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00054	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Acetone	<0.015		0.015	0.0067	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Bromoform	<0.0015		0.0015	0.00045	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Carbon disulfide	<0.0038		0.0038	0.00080	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00043	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Methylene Chloride	<0.0038	+	0.0038	0.0015	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Toluene	<0.0015		0.0015	0.00039	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00068	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00054	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Trichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Vinyl chloride	<0.0015		0.0015	0.00068	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1
Xylenes, Total	<0.0031		0.0031	0.00049	mg/Kg	☼	01/13/23 17:33	01/20/23 17:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	01/13/23 17:33	01/20/23 17:47	1
4-Bromofluorobenzene (Surr)	104		75 - 131	01/13/23 17:33	01/20/23 17:47	1
Dibromofluoromethane	85		75 - 126	01/13/23 17:33	01/20/23 17:47	1
Toluene-d8 (Surr)	92		75 - 124	01/13/23 17:33	01/20/23 17:47	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	☼	01/19/23 13:31	01/23/23 16:00	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	01/19/23 13:31	01/23/23 16:00	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	01/19/23 13:31	01/23/23 16:00	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	01/19/23 13:31	01/23/23 16:00	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	01/19/23 13:31	01/23/23 16:00	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B01-2**

**Lab Sample ID: 500-228081-2**

Date Collected: 01/13/23 12:20

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
2-Methylnaphthalene	<0.073		0.073	0.0066	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Benzo[b]fluoranthene	<0.036		0.036	0.0078	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Carbazole	<0.18		0.18	0.090	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Chrysene	<0.036		0.036	0.0099	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Fluoranthene	<0.036		0.036	0.0067	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B01-2**

**Lab Sample ID: 500-228081-2**

Date Collected: 01/13/23 12:20

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 88.4

## 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	<0.036		0.036	0.0094	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Isophorone	<0.18		0.18	0.041	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
N-Nitrosodi-n-propylamine	<0.073		0.073	0.044	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
<b>Phenanthrene</b>	<b>0.0055</b>	<b>J</b>	0.036	0.0050	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Phenol	<0.18		0.18	0.080	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1
Pyrene	<0.036		0.036	0.0072	mg/Kg	✱	01/19/23 13:31	01/23/23 16:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	83		31 - 143	01/19/23 13:31	01/23/23 16:00	1
2-Fluorobiphenyl	77		43 - 145	01/19/23 13:31	01/23/23 16:00	1
2-Fluorophenol	98		31 - 166	01/19/23 13:31	01/23/23 16:00	1
Nitrobenzene-d5 (Surr)	68		37 - 147	01/19/23 13:31	01/23/23 16:00	1
Phenol-d5	93		30 - 153	01/19/23 13:31	01/23/23 16:00	1
Terphenyl-d14 (Surr)	88		42 - 157	01/19/23 13:31	01/23/23 16:00	1

## Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.019		0.019	0.0073	mg/Kg	✱	01/24/23 08:53	01/26/23 13:22	1
PCB-1221	<0.019		0.019	0.0073	mg/Kg	✱	01/24/23 08:53	01/26/23 13:22	1
PCB-1232	<0.019		0.019	0.0050	mg/Kg	✱	01/24/23 08:53	01/26/23 13:22	1
PCB-1242	<0.019		0.019	0.0072	mg/Kg	✱	01/24/23 08:53	01/26/23 13:22	1
PCB-1248	<0.019		0.019	0.0088	mg/Kg	✱	01/24/23 08:53	01/26/23 13:22	1
PCB-1254	<0.019		0.019	0.0063	mg/Kg	✱	01/24/23 08:53	01/26/23 13:22	1
PCB-1260	<0.019		0.019	0.0070	mg/Kg	✱	01/24/23 08:53	01/26/23 13:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	79		49 - 129	01/24/23 08:53	01/26/23 13:22	1
DCB Decachlorobiphenyl	102		37 - 121	01/24/23 08:53	01/26/23 13:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.58</b>	<b>J</b>	1.1	0.21	mg/Kg	✱	01/20/23 09:30	01/24/23 00:14	1
<b>Arsenic</b>	<b>12</b>		0.54	0.19	mg/Kg	✱	01/20/23 09:30	01/24/23 00:14	1
<b>Barium</b>	<b>22</b>		2.7	0.31	mg/Kg	✱	01/20/23 09:30	01/24/23 20:44	5
<b>Beryllium</b>	<b>0.37</b>		0.22	0.051	mg/Kg	✱	01/20/23 09:30	01/24/23 00:14	1
<b>Boron</b>	<b>7.2</b>		2.7	0.25	mg/Kg	✱	01/20/23 09:30	01/24/23 00:14	1
<b>Cadmium</b>	<b>0.28</b>		0.11	0.020	mg/Kg	✱	01/20/23 09:30	01/24/23 00:14	1
<b>Calcium</b>	<b>100000</b>		54	9.2	mg/Kg	✱	01/20/23 09:30	01/24/23 20:44	5
<b>Chromium</b>	<b>7.0</b>		0.54	0.27	mg/Kg	✱	01/20/23 09:30	01/24/23 00:14	1
<b>Cobalt</b>	<b>8.4</b>	<b>^1+</b>	0.27	0.071	mg/Kg	✱	01/20/23 09:30	01/24/23 00:14	1
<b>Copper</b>	<b>29</b>		0.54	0.15	mg/Kg	✱	01/20/23 09:30	01/24/23 00:14	1
<b>Iron</b>	<b>17000</b>	<b>B</b>	54	28	mg/Kg	✱	01/20/23 09:30	01/24/23 20:44	5
<b>Lead</b>	<b>13</b>		0.27	0.13	mg/Kg	✱	01/20/23 09:30	01/24/23 00:14	1
<b>Magnesium</b>	<b>64000</b>		27	14	mg/Kg	✱	01/20/23 09:30	01/24/23 20:44	5
<b>Manganese</b>	<b>320</b>		0.54	0.079	mg/Kg	✱	01/20/23 09:30	01/24/23 00:14	1
<b>Nickel</b>	<b>18</b>		0.54	0.16	mg/Kg	✱	01/20/23 09:30	01/24/23 00:14	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B01-2**

**Lab Sample ID: 500-228081-2**

Date Collected: 01/13/23 12:20

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 88.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	980		27	9.6	mg/Kg	☼	01/20/23 09:30	01/24/23 00:14	1
Selenium	0.58		0.54	0.32	mg/Kg	☼	01/20/23 09:30	01/24/23 00:14	1
Silver	0.17	J	0.27	0.070	mg/Kg	☼	01/20/23 09:30	01/24/23 00:14	1
Sodium	570		54	8.1	mg/Kg	☼	01/20/23 09:30	01/24/23 00:14	1
Thallium	0.48	J	0.54	0.27	mg/Kg	☼	01/20/23 09:30	01/24/23 00:14	1
Vanadium	9.5		0.27	0.064	mg/Kg	☼	01/20/23 09:30	01/24/23 00:14	1
Zinc	50		1.1	0.48	mg/Kg	☼	01/20/23 09:30	01/24/23 00:14	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		01/26/23 17:59	01/27/23 15:03	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/26/23 17:59	01/27/23 15:03	1

### 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		01/27/23 17:01	01/28/23 17:42	1
Barium	0.059	J	0.50	0.050	mg/L		01/27/23 17:01	01/28/23 17:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/27/23 17:01	01/28/23 17:42	1
Boron	<0.10		0.10	0.050	mg/L		01/27/23 17:01	01/28/23 17:42	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/27/23 17:01	01/28/23 17:42	1
Calcium	9.3		2.5	0.50	mg/L		01/27/23 17:01	01/28/23 17:42	1
Chromium	0.016	J	0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:42	1
Cobalt	<0.025		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:42	1
Iron	16		0.40	0.20	mg/L		01/27/23 17:01	01/28/23 17:42	1
Lead	0.0098		0.0075	0.0075	mg/L		01/27/23 17:01	01/28/23 17:42	1
Manganese	0.083		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:42	1
Nickel	0.020	J	0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:42	1
Potassium	5.1		2.5	0.50	mg/L		01/27/23 17:01	01/28/23 17:42	1
Selenium	<0.050		0.050	0.020	mg/L		01/27/23 17:01	01/28/23 17:42	1
Silver	<0.025		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:42	1
Zinc	0.068	J	0.50	0.020	mg/L		01/27/23 17:01	01/28/23 17:42	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		01/27/23 17:01	01/30/23 11:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/27/23 17:01	01/30/23 11:32	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		01/27/23 15:30	01/30/23 07:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.017		0.016	0.0087	mg/Kg	☼	01/23/23 16:30	01/24/23 10:11	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.59		0.59	0.22	mg/Kg	☼	01/19/23 11:44	01/19/23 12:53	1
pH (SW846 9045D)	7.8		0.2	0.2	SU			01/19/23 19:58	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B02-1**

**Lab Sample ID: 500-228081-3**

Date Collected: 01/13/23 12:30

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 87.2

**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	0.00058	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
1,1-Dichloroethene	<0.0017		0.0017	0.00059	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
1,2-Dichloroethane	<0.0043		0.0043	0.0013	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
1,2-Dichloropropane	<0.0017		0.0017	0.00044	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00060	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
2-Hexanone	<0.0043		0.0043	0.0013	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Acetone	<0.017		0.017	0.0075	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Bromoform	<0.0017		0.0017	0.00050	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Carbon disulfide	<0.0043		0.0043	0.00089	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Chlorobenzene	<0.0017		0.0017	0.00063	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Dibromochloromethane	<0.0017		0.0017	0.00056	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Ethylbenzene	<0.0017		0.0017	0.00082	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00050	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Methylene Chloride	<0.0043	+	0.0043	0.0017	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Toluene	<0.0017		0.0017	0.00043	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00076	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00060	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Trichloroethene	<0.0017		0.0017	0.00058	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Vinyl chloride	<0.0017		0.0017	0.00076	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1
Xylenes, Total	<0.0034		0.0034	0.00055	mg/Kg	✳	01/13/23 17:33	01/20/23 18:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	01/13/23 17:33	01/20/23 18:12	1
4-Bromofluorobenzene (Surr)	94		75 - 131	01/13/23 17:33	01/20/23 18:12	1
Dibromofluoromethane	82		75 - 126	01/13/23 17:33	01/20/23 18:12	1
Toluene-d8 (Surr)	89		75 - 124	01/13/23 17:33	01/20/23 18:12	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	✳	01/19/23 13:31	01/23/23 16:23	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
1,3-Dichlorobenzene	<0.19		0.19	0.041	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B02-1**

**Lab Sample ID: 500-228081-3**

Date Collected: 01/13/23 12:30

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 87.2

**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	✳	01/19/23 13:31	01/23/23 16:23	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
2,4-Dinitrotoluene	<0.19		0.19	0.058	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
2,6-Dinitrotoluene	<0.19		0.19	0.072	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
3 & 4 Methylphenol	<0.19		0.19	0.061	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.043	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Anthracene	<0.037		0.037	0.0061	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
<b>Benzo[a]anthracene</b>	<b>0.0053</b>	<b>J</b>	0.037	0.0050	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
<b>Benzo[a]pyrene</b>	<b>0.014</b>	<b>J</b>	0.037	0.0071	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
<b>Benzo[b]fluoranthene</b>	<b>0.020</b>	<b>J</b>	0.037	0.0079	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.067	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Carbazole	<0.19		0.19	0.092	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Chrysene	<0.037		0.037	0.010	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0071	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Diethyl phthalate	<0.19		0.19	0.062	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
<b>Fluoranthene</b>	<b>0.012</b>	<b>J</b>	0.037	0.0068	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B02-1**

**Lab Sample ID: 500-228081-3**

Date Collected: 01/13/23 12:30

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 87.2

## 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>0.0098</b>	<b>J</b>	0.037	0.0095	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Isophorone	<0.19		0.19	0.041	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
N-Nitrosodiphenylamine	<0.19		0.19	0.043	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Phenanthrene	<0.037		0.037	0.0051	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
Phenol	<0.19		0.19	0.082	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1
<b>Pyrene</b>	<b>0.011</b>	<b>J</b>	0.037	0.0073	mg/Kg	✳	01/19/23 13:31	01/23/23 16:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	73		31 - 143	01/19/23 13:31	01/23/23 16:23	1
2-Fluorobiphenyl	67		43 - 145	01/19/23 13:31	01/23/23 16:23	1
2-Fluorophenol	92		31 - 166	01/19/23 13:31	01/23/23 16:23	1
Nitrobenzene-d5 (Surr)	58		37 - 147	01/19/23 13:31	01/23/23 16:23	1
Phenol-d5	85		30 - 153	01/19/23 13:31	01/23/23 16:23	1
Terphenyl-d14 (Surr)	84		42 - 157	01/19/23 13:31	01/23/23 16:23	1

## Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.019		0.019	0.0074	mg/Kg	✳	01/24/23 08:53	01/26/23 13:37	1
PCB-1221	<0.019		0.019	0.0074	mg/Kg	✳	01/24/23 08:53	01/26/23 13:37	1
PCB-1232	<0.019		0.019	0.0051	mg/Kg	✳	01/24/23 08:53	01/26/23 13:37	1
PCB-1242	<0.019		0.019	0.0074	mg/Kg	✳	01/24/23 08:53	01/26/23 13:37	1
PCB-1248	<0.019		0.019	0.0090	mg/Kg	✳	01/24/23 08:53	01/26/23 13:37	1
PCB-1254	<0.019		0.019	0.0064	mg/Kg	✳	01/24/23 08:53	01/26/23 13:37	1
PCB-1260	<0.019		0.019	0.0071	mg/Kg	✳	01/24/23 08:53	01/26/23 13:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	84		49 - 129	01/24/23 08:53	01/26/23 13:37	1
DCB Decachlorobiphenyl	96		37 - 121	01/24/23 08:53	01/26/23 13:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.50</b>	<b>J</b>	1.1	0.20	mg/Kg	✳	01/20/23 09:30	01/24/23 00:18	1
<b>Arsenic</b>	<b>12</b>		0.53	0.18	mg/Kg	✳	01/20/23 09:30	01/24/23 00:18	1
<b>Barium</b>	<b>37</b>		0.53	0.060	mg/Kg	✳	01/20/23 09:30	01/24/23 00:18	1
<b>Beryllium</b>	<b>0.71</b>		0.21	0.049	mg/Kg	✳	01/20/23 09:30	01/24/23 00:18	1
<b>Boron</b>	<b>9.9</b>		2.6	0.24	mg/Kg	✳	01/20/23 09:30	01/24/23 00:18	1
<b>Cadmium</b>	<b>0.20</b>		0.11	0.019	mg/Kg	✳	01/20/23 09:30	01/24/23 00:18	1
<b>Calcium</b>	<b>50000</b>		21	3.6	mg/Kg	✳	01/20/23 09:30	01/24/23 20:47	2
<b>Chromium</b>	<b>14</b>		0.53	0.26	mg/Kg	✳	01/20/23 09:30	01/24/23 00:18	1
<b>Cobalt</b>	<b>13</b>	<b>^1+</b>	0.26	0.069	mg/Kg	✳	01/20/23 09:30	01/24/23 00:18	1
<b>Copper</b>	<b>28</b>		0.53	0.15	mg/Kg	✳	01/20/23 09:30	01/24/23 00:18	1
<b>Iron</b>	<b>22000</b>	<b>B</b>	11	5.5	mg/Kg	✳	01/20/23 09:30	01/24/23 00:18	1
<b>Lead</b>	<b>17</b>		0.26	0.12	mg/Kg	✳	01/20/23 09:30	01/24/23 00:18	1
<b>Magnesium</b>	<b>30000</b>		5.3	2.6	mg/Kg	✳	01/20/23 09:30	01/24/23 00:18	1
<b>Manganese</b>	<b>360</b>		0.53	0.076	mg/Kg	✳	01/20/23 09:30	01/24/23 00:18	1
<b>Nickel</b>	<b>31</b>		0.53	0.15	mg/Kg	✳	01/20/23 09:30	01/24/23 00:18	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B02-1**

**Lab Sample ID: 500-228081-3**

Date Collected: 01/13/23 12:30

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	1900		26	9.3	mg/Kg	☼	01/20/23 09:30	01/24/23 00:18	1
Selenium	0.45	J	0.53	0.31	mg/Kg	☼	01/20/23 09:30	01/24/23 00:18	1
Silver	0.29		0.26	0.068	mg/Kg	☼	01/20/23 09:30	01/24/23 00:18	1
Sodium	360		53	7.8	mg/Kg	☼	01/20/23 09:30	01/24/23 00:18	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	01/20/23 09:30	01/24/23 00:18	1
Vanadium	18		0.26	0.062	mg/Kg	☼	01/20/23 09:30	01/24/23 00:18	1
Zinc	71		1.1	0.46	mg/Kg	☼	01/20/23 09:30	01/24/23 00:18	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		01/26/23 17:59	01/27/23 15:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/26/23 17:59	01/27/23 15:20	1
Chromium	<0.025		0.025	0.010	mg/L		01/26/23 17:59	01/27/23 15:20	1
Iron	<0.40		0.40	0.20	mg/L		01/26/23 17:59	01/27/23 15:20	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/26/23 17:59	01/27/23 15:20	1
Manganese	0.66		0.025	0.010	mg/L		01/26/23 17:59	01/27/23 15:20	1
Nickel	<0.025		0.025	0.010	mg/L		01/26/23 17:59	01/27/23 15:20	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		01/27/23 17:01	01/28/23 17:45	1
Barium	0.33	J	0.50	0.050	mg/L		01/27/23 17:01	01/28/23 17:45	1
Beryllium	0.0070		0.0040	0.0040	mg/L		01/27/23 17:01	01/28/23 17:45	1
Boron	0.13		0.10	0.050	mg/L		01/27/23 17:01	01/28/23 17:45	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/27/23 17:01	01/28/23 17:45	1
Calcium	19		2.5	0.50	mg/L		01/27/23 17:01	01/28/23 17:45	1
Chromium	0.13		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:45	1
Cobalt	0.058		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:45	1
Iron	190		0.40	0.20	mg/L		01/27/23 17:01	01/28/23 17:45	1
Lead	0.12		0.0075	0.0075	mg/L		01/27/23 17:01	01/28/23 17:45	1
Manganese	0.47		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:45	1
Nickel	0.18		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:45	1
Potassium	23		2.5	0.50	mg/L		01/27/23 17:01	01/28/23 17:45	1
Selenium	<0.050		0.050	0.020	mg/L		01/27/23 17:01	01/28/23 17:45	1
Silver	<0.025		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:45	1
Zinc	0.51		0.50	0.020	mg/L		01/27/23 17:01	01/28/23 17:45	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		01/26/23 17:59	01/30/23 12:19	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		01/27/23 17:01	01/30/23 11:34	1
Thallium	0.0063		0.0020	0.0020	mg/L		01/27/23 17:01	01/30/23 11:34	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		01/27/23 15:30	01/30/23 07:36	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
 Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B02-1**

**Lab Sample ID: 500-228081-3**

Date Collected: 01/13/23 12:30

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.018	0.0094	mg/Kg	☆	01/23/23 16:30	01/24/23 10:13	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.60		0.60	0.23	mg/Kg	☆	01/19/23 11:48	01/19/23 12:59	1
pH (SW846 9045D)	8.1		0.2	0.2	SU			01/19/23 20:00	1



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B02-2**

**Lab Sample ID: 500-228081-4**

Date Collected: 01/13/23 12:40

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00052	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00070	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
1,1-Dichloroethene	<0.0016		0.0016	0.00056	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00057	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Acetone	<0.016		0.016	0.0071	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Bromomethane	<0.0041		0.0041	0.0015	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Carbon tetrachloride	<0.0016		0.0016	0.00047	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Chlorobenzene	<0.0016		0.0016	0.00060	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Chloromethane	<0.0041		0.0041	0.0016	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00049	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Dibromochloromethane	<0.0016		0.0016	0.00053	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Ethylbenzene	<0.0016		0.0016	0.00078	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Methylene Chloride	<0.0041	+	0.0041	0.0016	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Styrene	<0.0016		0.0016	0.00049	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Toluene	<0.0016		0.0016	0.00041	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00072	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00057	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Trichloroethene	<0.0016		0.0016	0.00055	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Vinyl chloride	<0.0016		0.0016	0.00072	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1
Xylenes, Total	<0.0033		0.0033	0.00052	mg/Kg	✳	01/13/23 17:33	01/20/23 18:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		70 - 134	01/13/23 17:33	01/20/23 18:38	1
4-Bromofluorobenzene (Surr)	102		75 - 131	01/13/23 17:33	01/20/23 18:38	1
Dibromofluoromethane	83		75 - 126	01/13/23 17:33	01/20/23 18:38	1
Toluene-d8 (Surr)	92		75 - 124	01/13/23 17:33	01/20/23 18:38	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	✳	01/19/23 13:31	01/23/23 16:46	1
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	✳	01/19/23 13:31	01/23/23 16:46	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	✳	01/19/23 13:31	01/23/23 16:46	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	✳	01/19/23 13:31	01/23/23 16:46	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	✳	01/19/23 13:31	01/23/23 16:46	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B02-2**

**Lab Sample ID: 500-228081-4**

Date Collected: 01/13/23 12:40

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
<b>Benzo[a]pyrene</b>	<b>0.013</b>	<b>J</b>	0.038	0.0074	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
<b>Benzo[b]fluoranthene</b>	<b>0.017</b>	<b>J</b>	0.038	0.0083	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Carbazole	<0.19		0.19	0.096	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Chrysene	<0.038		0.038	0.010	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
<b>Fluoranthene</b>	<b>0.0084</b>	<b>J</b>	0.038	0.0071	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B02-2**

**Lab Sample ID: 500-228081-4**

Date Collected: 01/13/23 12:40

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 85.5

## 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	<0.038		0.038	0.0099	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Isophorone	<0.19		0.19	0.043	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.047	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
Phenol	<0.19		0.19	0.085	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1
<b>Pyrene</b>	<b>0.0087</b>	<b>J</b>	0.038	0.0076	mg/Kg	✱	01/19/23 13:31	01/23/23 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	86		31 - 143	01/19/23 13:31	01/23/23 16:46	1
2-Fluorobiphenyl	74		43 - 145	01/19/23 13:31	01/23/23 16:46	1
2-Fluorophenol	102		31 - 166	01/19/23 13:31	01/23/23 16:46	1
Nitrobenzene-d5 (Surr)	63		37 - 147	01/19/23 13:31	01/23/23 16:46	1
Phenol-d5	77		30 - 153	01/19/23 13:31	01/23/23 16:46	1
Terphenyl-d14 (Surr)	89		42 - 157	01/19/23 13:31	01/23/23 16:46	1

## Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.019		0.019	0.0074	mg/Kg	✱	01/24/23 08:53	01/26/23 13:52	1
PCB-1221	<0.019		0.019	0.0074	mg/Kg	✱	01/24/23 08:53	01/26/23 13:52	1
PCB-1232	<0.019		0.019	0.0051	mg/Kg	✱	01/24/23 08:53	01/26/23 13:52	1
PCB-1242	<0.019		0.019	0.0073	mg/Kg	✱	01/24/23 08:53	01/26/23 13:52	1
PCB-1248	<0.019		0.019	0.0089	mg/Kg	✱	01/24/23 08:53	01/26/23 13:52	1
PCB-1254	<0.019		0.019	0.0064	mg/Kg	✱	01/24/23 08:53	01/26/23 13:52	1
PCB-1260	<0.019		0.019	0.0071	mg/Kg	✱	01/24/23 08:53	01/26/23 13:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	74		49 - 129	01/24/23 08:53	01/26/23 13:52	1
DCB Decachlorobiphenyl	91		37 - 121	01/24/23 08:53	01/26/23 13:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.42</b>	<b>J</b>	1.1	0.22	mg/Kg	✱	01/20/23 09:30	01/24/23 00:21	1
<b>Arsenic</b>	<b>6.1</b>		0.56	0.19	mg/Kg	✱	01/20/23 09:30	01/24/23 00:21	1
<b>Barium</b>	<b>26</b>		2.8	0.32	mg/Kg	✱	01/20/23 09:30	01/24/23 20:50	5
<b>Beryllium</b>	<b>0.33</b>		0.22	0.052	mg/Kg	✱	01/20/23 09:30	01/24/23 00:21	1
<b>Boron</b>	<b>8.6</b>		2.8	0.26	mg/Kg	✱	01/20/23 09:30	01/24/23 00:21	1
<b>Cadmium</b>	<b>0.18</b>		0.11	0.020	mg/Kg	✱	01/20/23 09:30	01/24/23 00:21	1
<b>Calcium</b>	<b>140000</b>		56	9.4	mg/Kg	✱	01/20/23 09:30	01/24/23 20:50	5
<b>Chromium</b>	<b>6.5</b>		0.56	0.28	mg/Kg	✱	01/20/23 09:30	01/24/23 00:21	1
<b>Cobalt</b>	<b>3.8</b>	<b>^1+</b>	0.28	0.073	mg/Kg	✱	01/20/23 09:30	01/24/23 00:21	1
<b>Copper</b>	<b>16</b>		0.56	0.16	mg/Kg	✱	01/20/23 09:30	01/24/23 00:21	1
<b>Iron</b>	<b>15000</b>	<b>B</b>	56	29	mg/Kg	✱	01/20/23 09:30	01/24/23 20:50	5
<b>Lead</b>	<b>9.6</b>		0.28	0.13	mg/Kg	✱	01/20/23 09:30	01/24/23 00:21	1
<b>Magnesium</b>	<b>86000</b>		28	14	mg/Kg	✱	01/20/23 09:30	01/24/23 20:50	5
<b>Manganese</b>	<b>190</b>		0.56	0.081	mg/Kg	✱	01/20/23 09:30	01/24/23 00:21	1
<b>Nickel</b>	<b>12</b>		0.56	0.16	mg/Kg	✱	01/20/23 09:30	01/24/23 00:21	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B02-2**

**Lab Sample ID: 500-228081-4**

Date Collected: 01/13/23 12:40

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 85.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Potassium</b>	<b>1000</b>		28	9.9	mg/Kg	☼	01/20/23 09:30	01/24/23 00:21	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	01/20/23 09:30	01/24/23 00:21	1
Silver	<0.28		0.28	0.072	mg/Kg	☼	01/20/23 09:30	01/24/23 00:21	1
<b>Sodium</b>	<b>270</b>		56	8.2	mg/Kg	☼	01/20/23 09:30	01/24/23 00:21	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	01/20/23 09:30	01/24/23 00:21	1
<b>Vanadium</b>	<b>8.8</b>		0.28	0.066	mg/Kg	☼	01/20/23 09:30	01/24/23 00:21	1
<b>Zinc</b>	<b>34</b>		1.1	0.49	mg/Kg	☼	01/20/23 09:30	01/24/23 00:21	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		01/26/23 17:59	01/27/23 15:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/26/23 17:59	01/27/23 15:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.025</b>	<b>J</b>	0.050	0.010	mg/L		01/27/23 17:01	01/28/23 17:48	1
<b>Barium</b>	<b>0.11</b>	<b>J</b>	0.50	0.050	mg/L		01/27/23 17:01	01/28/23 17:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/27/23 17:01	01/28/23 17:48	1
<b>Boron</b>	<b>0.061</b>	<b>J</b>	0.10	0.050	mg/L		01/27/23 17:01	01/28/23 17:48	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/27/23 17:01	01/28/23 17:48	1
<b>Calcium</b>	<b>13</b>		2.5	0.50	mg/L		01/27/23 17:01	01/28/23 17:48	1
<b>Chromium</b>	<b>0.045</b>		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:48	1
<b>Cobalt</b>	<b>0.018</b>	<b>J</b>	0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:48	1
<b>Iron</b>	<b>52</b>		0.40	0.20	mg/L		01/27/23 17:01	01/28/23 17:48	1
<b>Lead</b>	<b>0.051</b>		0.0075	0.0075	mg/L		01/27/23 17:01	01/28/23 17:48	1
<b>Manganese</b>	<b>0.14</b>		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:48	1
<b>Nickel</b>	<b>0.057</b>		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:48	1
<b>Potassium</b>	<b>10</b>		2.5	0.50	mg/L		01/27/23 17:01	01/28/23 17:48	1
Selenium	<0.050		0.050	0.020	mg/L		01/27/23 17:01	01/28/23 17:48	1
Silver	<0.025		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:48	1
<b>Zinc</b>	<b>0.19</b>	<b>J</b>	0.50	0.020	mg/L		01/27/23 17:01	01/28/23 17:48	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		01/27/23 17:01	01/30/23 11:36	1
<b>Thallium</b>	<b>0.0020</b>		0.0020	0.0020	mg/L		01/27/23 17:01	01/30/23 11:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.00027</b>		0.00020	0.00020	mg/L		01/27/23 15:30	01/30/23 07:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.041</b>		0.018	0.0097	mg/Kg	☼	01/23/23 16:30	01/24/23 10:14	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.61		0.61	0.23	mg/Kg	☼	01/19/23 11:49	01/19/23 13:15	1
<b>pH (SW846 9045D)</b>	<b>8.5</b>		0.2	0.2	SU			01/19/23 20:03	1

Euofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B03-1**

**Lab Sample ID: 500-228081-5**

**Date Collected: 01/13/23 12:50**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**Percent Solids: 80.5**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0021		0.0021	0.00069	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00066	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00089	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
1,1-Dichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
1,1-Dichloroethene	<0.0021		0.0021	0.00071	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
1,2-Dichloroethane	<0.0052		0.0052	0.0016	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
1,2-Dichloropropane	<0.0021		0.0021	0.00053	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00073	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
2-Butanone (MEK)	<0.0052		0.0052	0.0023	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0015	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Acetone	<0.021		0.021	0.0090	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Benzene	<0.0021		0.0021	0.00053	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Bromodichloromethane	<0.0021		0.0021	0.00042	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Bromoform	<0.0021		0.0021	0.00060	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Bromomethane	<0.0052		0.0052	0.0020	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Carbon disulfide	<0.0052		0.0052	0.0011	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Carbon tetrachloride	<0.0021		0.0021	0.00060	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Chlorobenzene	<0.0021		0.0021	0.00076	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Chloroethane	<0.0052		0.0052	0.0015	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Chloroform	<0.0021		0.0021	0.00072	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Chloromethane	<0.0052		0.0052	0.0021	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00058	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00062	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Dibromochloromethane	<0.0021		0.0021	0.00068	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Ethylbenzene	<0.0021		0.0021	0.00099	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00061	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Methylene Chloride	<0.0052	+	0.0052	0.0020	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Styrene	<0.0021		0.0021	0.00062	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Tetrachloroethene	<0.0021		0.0021	0.00070	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Toluene	<0.0021		0.0021	0.00052	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00092	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00073	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Trichloroethene	<0.0021		0.0021	0.00070	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Vinyl chloride	<0.0021		0.0021	0.00091	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1
Xylenes, Total	<0.0041		0.0041	0.00066	mg/Kg	☆	01/13/23 17:33	01/20/23 19:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		70 - 134	01/13/23 17:33	01/20/23 19:03	1
4-Bromofluorobenzene (Surr)	99		75 - 131	01/13/23 17:33	01/20/23 19:03	1
Dibromofluoromethane	83		75 - 126	01/13/23 17:33	01/20/23 19:03	1
Toluene-d8 (Surr)	94		75 - 124	01/13/23 17:33	01/20/23 19:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.30		0.30	0.065	mg/Kg	☆	01/19/23 13:31	01/23/23 17:09	1
1,2-Dichlorobenzene	<0.30		0.30	0.073	mg/Kg	☆	01/19/23 13:31	01/23/23 17:09	1
1,3-Dichlorobenzene	<0.30		0.30	0.068	mg/Kg	☆	01/19/23 13:31	01/23/23 17:09	1
1,4-Dichlorobenzene	<0.30		0.30	0.078	mg/Kg	☆	01/19/23 13:31	01/23/23 17:09	1
2,2'-oxybis[1-chloropropane]	<0.30		0.30	0.070	mg/Kg	☆	01/19/23 13:31	01/23/23 17:09	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B03-1**

**Lab Sample ID: 500-228081-5**

**Date Collected: 01/13/23 12:50**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**Percent Solids: 80.5**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.60		0.60	0.14	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
2,4,6-Trichlorophenol	<0.60		0.60	0.21	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
2,4-Dichlorophenol	<0.60		0.60	0.14	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
2,4-Dimethylphenol	<0.60		0.60	0.23	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
2,4-Dinitrophenol	<1.2		1.2	1.1	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
2,4-Dinitrotoluene	<0.30		0.30	0.096	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
2,6-Dinitrotoluene	<0.30		0.30	0.12	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
2-Chloronaphthalene	<0.30		0.30	0.067	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
2-Chlorophenol	<0.30		0.30	0.10	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
<b>2-Methylnaphthalene</b>	<b>0.013</b>	<b>J</b>	0.12	0.011	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
2-Methylphenol	<0.30		0.30	0.097	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
2-Nitroaniline	<0.30		0.30	0.082	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
2-Nitrophenol	<0.60		0.60	0.14	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
3 & 4 Methylphenol	<0.30		0.30	0.10	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
3,3'-Dichlorobenzidine	<0.30		0.30	0.085	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
3-Nitroaniline	<0.60		0.60	0.19	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
4,6-Dinitro-2-methylphenol	<1.2		1.2	0.49	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
4-Bromophenyl phenyl ether	<0.30		0.30	0.080	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
4-Chloro-3-methylphenol	<0.60		0.60	0.21	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
4-Chloroaniline	<1.2		1.2	0.28	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
4-Chlorophenyl phenyl ether	<0.30		0.30	0.071	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
4-Nitroaniline	<0.60		0.60	0.25	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
4-Nitrophenol	<1.2		1.2	0.58	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Acenaphthene	<0.060		0.060	0.011	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Acenaphthylene	<0.060		0.060	0.0080	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Anthracene	<0.060		0.060	0.010	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
<b>Benzo[a]anthracene</b>	<b>0.011</b>	<b>J</b>	0.060	0.0082	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
<b>Benzo[a]pyrene</b>	<b>0.015</b>	<b>J</b>	0.060	0.012	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
<b>Benzo[b]fluoranthene</b>	<b>0.018</b>	<b>J</b>	0.060	0.013	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Benzo[g,h,i]perylene	<0.060		0.060	0.020	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Benzo[k]fluoranthene	<0.060		0.060	0.018	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Bis(2-chloroethoxy)methane	<0.30		0.30	0.062	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Bis(2-chloroethyl)ether	<0.30		0.30	0.091	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Bis(2-ethylhexyl) phthalate	<0.30		0.30	0.11	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Butyl benzyl phthalate	<0.30		0.30	0.12	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Carbazole	<0.30		0.30	0.15	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Chrysene	<0.060		0.060	0.017	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Dibenz(a,h)anthracene	<0.060		0.060	0.012	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Dibenzofuran	<0.30		0.30	0.071	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Diethyl phthalate	<0.30		0.30	0.10	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Dimethyl phthalate	<0.30		0.30	0.079	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Di-n-butyl phthalate	<0.30		0.30	0.092	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Di-n-octyl phthalate	<0.30		0.30	0.099	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
<b>Fluoranthene</b>	<b>0.018</b>	<b>J</b>	0.060	0.011	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Fluorene	<0.060		0.060	0.0085	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Hexachlorobenzene	<0.12		0.12	0.014	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Hexachlorobutadiene	<0.30		0.30	0.095	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Hexachlorocyclopentadiene	<1.2		1.2	0.35	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Hexachloroethane	<0.30		0.30	0.092	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B03-1**

**Lab Sample ID: 500-228081-5**

Date Collected: 01/13/23 12:50

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 80.5

## 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	<0.060		0.060	0.016	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Isophorone	<0.30		0.30	0.068	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Naphthalene	<0.060		0.060	0.0093	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Nitrobenzene	<0.060		0.060	0.015	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
N-Nitrosodi-n-propylamine	<0.12		0.12	0.074	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
N-Nitrosodiphenylamine	<0.30		0.30	0.072	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Pentachlorophenol	<1.2		1.2	0.97	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
<b>Phenanthrene</b>	<b>0.027</b>	<b>J</b>	0.060	0.0085	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
Phenol	<0.30		0.30	0.13	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1
<b>Pyrene</b>	<b>0.015</b>	<b>J</b>	0.060	0.012	mg/Kg	✳	01/19/23 13:31	01/23/23 17:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	93		31 - 143	01/19/23 13:31	01/23/23 17:09	1
2-Fluorobiphenyl	78		43 - 145	01/19/23 13:31	01/23/23 17:09	1
2-Fluorophenol	102		31 - 166	01/19/23 13:31	01/23/23 17:09	1
Nitrobenzene-d5 (Surr)	68		37 - 147	01/19/23 13:31	01/23/23 17:09	1
Phenol-d5	103		30 - 153	01/19/23 13:31	01/23/23 17:09	1
Terphenyl-d14 (Surr)	100		42 - 157	01/19/23 13:31	01/23/23 17:09	1

## Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.021		0.021	0.0081	mg/Kg	✳	01/24/23 08:53	01/26/23 14:06	1
PCB-1221	<0.021		0.021	0.0081	mg/Kg	✳	01/24/23 08:53	01/26/23 14:06	1
PCB-1232	<0.021		0.021	0.0056	mg/Kg	✳	01/24/23 08:53	01/26/23 14:06	1
PCB-1242	<0.021		0.021	0.0080	mg/Kg	✳	01/24/23 08:53	01/26/23 14:06	1
PCB-1248	<0.021		0.021	0.0098	mg/Kg	✳	01/24/23 08:53	01/26/23 14:06	1
PCB-1254	<0.021		0.021	0.0070	mg/Kg	✳	01/24/23 08:53	01/26/23 14:06	1
PCB-1260	<0.021		0.021	0.0077	mg/Kg	✳	01/24/23 08:53	01/26/23 14:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	82		49 - 129	01/24/23 08:53	01/26/23 14:06	1
DCB Decachlorobiphenyl	105		37 - 121	01/24/23 08:53	01/26/23 14:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.64</b>	<b>J</b>	1.2	0.24	mg/Kg	✳	01/20/23 09:30	01/24/23 00:25	1
<b>Arsenic</b>	<b>13</b>		0.61	0.21	mg/Kg	✳	01/20/23 09:30	01/24/23 00:25	1
<b>Barium</b>	<b>79</b>		0.61	0.069	mg/Kg	✳	01/20/23 09:30	01/24/23 00:25	1
<b>Beryllium</b>	<b>0.97</b>		0.24	0.057	mg/Kg	✳	01/20/23 09:30	01/24/23 00:25	1
<b>Boron</b>	<b>11</b>		3.0	0.28	mg/Kg	✳	01/20/23 09:30	01/24/23 00:25	1
<b>Cadmium</b>	<b>0.26</b>		0.12	0.022	mg/Kg	✳	01/20/23 09:30	01/24/23 00:25	1
<b>Calcium</b>	<b>10000</b>		12	2.1	mg/Kg	✳	01/20/23 09:30	01/24/23 00:25	1
<b>Chromium</b>	<b>18</b>		0.61	0.30	mg/Kg	✳	01/20/23 09:30	01/24/23 00:25	1
<b>Cobalt</b>	<b>12</b>	<b>^1+</b>	0.30	0.079	mg/Kg	✳	01/20/23 09:30	01/24/23 00:25	1
<b>Copper</b>	<b>25</b>		0.61	0.17	mg/Kg	✳	01/20/23 09:30	01/24/23 00:25	1
<b>Iron</b>	<b>27000</b>	<b>B</b>	12	6.3	mg/Kg	✳	01/20/23 09:30	01/24/23 00:25	1
<b>Lead</b>	<b>23</b>		0.30	0.14	mg/Kg	✳	01/20/23 09:30	01/24/23 00:25	1
<b>Magnesium</b>	<b>6700</b>		6.1	3.0	mg/Kg	✳	01/20/23 09:30	01/24/23 00:25	1
<b>Manganese</b>	<b>370</b>		0.61	0.088	mg/Kg	✳	01/20/23 09:30	01/24/23 00:25	1
<b>Nickel</b>	<b>27</b>		0.61	0.18	mg/Kg	✳	01/20/23 09:30	01/24/23 00:25	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B03-1**

**Lab Sample ID: 500-228081-5**

Date Collected: 01/13/23 12:50

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 80.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium	2200		30	11	mg/Kg	☼	01/20/23 09:30	01/24/23 00:25	1
Selenium	0.56	J	0.61	0.36	mg/Kg	☼	01/20/23 09:30	01/24/23 00:25	1
Silver	0.40		0.30	0.078	mg/Kg	☼	01/20/23 09:30	01/24/23 00:25	1
Sodium	220		61	9.0	mg/Kg	☼	01/20/23 09:30	01/24/23 00:25	1
Thallium	<0.61		0.61	0.30	mg/Kg	☼	01/20/23 09:30	01/24/23 00:25	1
Vanadium	25		0.30	0.071	mg/Kg	☼	01/20/23 09:30	01/24/23 00:25	1
Zinc	100		1.2	0.53	mg/Kg	☼	01/20/23 09:30	01/24/23 00:25	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		01/26/23 17:59	01/27/23 15:27	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/26/23 17:59	01/27/23 15:27	1
Manganese	0.077		0.025	0.010	mg/L		01/26/23 17:59	01/27/23 15:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.021	J	0.050	0.010	mg/L		01/27/23 17:01	01/28/23 17:51	1
Barium	0.21	J	0.50	0.050	mg/L		01/27/23 17:01	01/28/23 17:51	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/27/23 17:01	01/28/23 17:51	1
Boron	0.093	J	0.10	0.050	mg/L		01/27/23 17:01	01/28/23 17:51	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/27/23 17:01	01/28/23 17:51	1
Calcium	15		2.5	0.50	mg/L		01/27/23 17:01	01/28/23 17:51	1
Chromium	0.055		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:51	1
Cobalt	0.011	J	0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:51	1
Iron	51		0.40	0.20	mg/L		01/27/23 17:01	01/28/23 17:51	1
Lead	0.026		0.0075	0.0075	mg/L		01/27/23 17:01	01/28/23 17:51	1
Manganese	0.24		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:51	1
Nickel	0.045		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:51	1
Potassium	11		2.5	0.50	mg/L		01/27/23 17:01	01/28/23 17:51	1
Selenium	<0.050		0.050	0.020	mg/L		01/27/23 17:01	01/28/23 17:51	1
Silver	<0.025		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:51	1
Zinc	0.21	J	0.50	0.020	mg/L		01/27/23 17:01	01/28/23 17:51	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		01/26/23 17:59	01/30/23 12:23	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		01/27/23 17:01	01/30/23 11:38	1
Thallium	0.0022		0.0020	0.0020	mg/L		01/27/23 17:01	01/30/23 11:38	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		01/27/23 15:30	01/30/23 07:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.020	0.010	mg/Kg	☼	01/23/23 16:30	01/24/23 10:16	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B03-1**

**Lab Sample ID: 500-228081-5**

**Date Collected: 01/13/23 12:50**

**Matrix: Solid**

**Date Received: 01/13/23 16:15**

**Percent Solids: 80.5**

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.46	J	0.60	0.23	mg/Kg	☼	01/19/23 11:50	01/19/23 13:16	1
pH (SW846 9045D)	8.1		0.2	0.2	SU			01/19/23 20:05	1

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B03-2**

**Lab Sample ID: 500-228081-6**

Date Collected: 01/13/23 13:00

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 90.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00077	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
1,1-Dichloroethane	<0.0018		0.0018	0.00062	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
1,1-Dichloroethene	<0.0018		0.0018	0.00062	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
1,2-Dichloropropane	<0.0018		0.0018	0.00047	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
2-Butanone (MEK)	<0.0045		0.0045	0.0020	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Acetone	<0.018		0.018	0.0078	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Benzene	<0.0018		0.0018	0.00046	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Bromoform	<0.0018		0.0018	0.00053	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Carbon disulfide	<0.0045		0.0045	0.00094	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Dibromochloromethane	<0.0018		0.0018	0.00059	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Ethylbenzene	<0.0018		0.0018	0.00086	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00053	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Methylene Chloride	<0.0045	+	0.0045	0.0018	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00080	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Trichloroethene	<0.0018		0.0018	0.00061	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Vinyl chloride	<0.0018		0.0018	0.00080	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1
Xylenes, Total	<0.0036		0.0036	0.00058	mg/Kg	✱	01/13/23 17:33	01/20/23 19:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		70 - 134	01/13/23 17:33	01/20/23 19:29	1
4-Bromofluorobenzene (Surr)	107		75 - 131	01/13/23 17:33	01/20/23 19:29	1
Dibromofluoromethane	85		75 - 126	01/13/23 17:33	01/20/23 19:29	1
Toluene-d8 (Surr)	96		75 - 124	01/13/23 17:33	01/20/23 19:29	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	✱	01/19/23 13:31	01/23/23 17:32	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	✱	01/19/23 13:31	01/23/23 17:32	1
1,3-Dichlorobenzene	<0.18		0.18	0.040	mg/Kg	✱	01/19/23 13:31	01/23/23 17:32	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	✱	01/19/23 13:31	01/23/23 17:32	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	✱	01/19/23 13:31	01/23/23 17:32	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B03-2**

**Lab Sample ID: 500-228081-6**

Date Collected: 01/13/23 13:00

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 90.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
2,4-Dichlorophenol	<0.36		0.36	0.085	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
<b>2-Methylnaphthalene</b>	<b>0.098</b>		0.072	0.0066	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
2-Nitrophenol	<0.36		0.36	0.085	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.047	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
4-Chloroaniline	<0.72		0.72	0.17	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.042	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Acenaphthene	<0.036		0.036	0.0064	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Acenaphthylene	<0.036		0.036	0.0047	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
<b>Anthracene</b>	<b>0.019</b>	<b>J</b>	0.036	0.0060	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
<b>Benzo[a]anthracene</b>	<b>0.060</b>		0.036	0.0048	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
<b>Benzo[a]pyrene</b>	<b>0.074</b>		0.036	0.0069	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
<b>Benzo[b]fluoranthene</b>	<b>0.10</b>		0.036	0.0077	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
<b>Benzo[g,h,i]perylene</b>	<b>0.022</b>	<b>J</b>	0.036	0.012	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
<b>Benzo[k]fluoranthene</b>	<b>0.031</b>	<b>J</b>	0.036	0.011	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Carbazole	<0.18		0.18	0.090	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
<b>Chrysene</b>	<b>0.070</b>		0.036	0.0098	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0069	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
<b>Fluoranthene</b>	<b>0.11</b>		0.036	0.0067	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
<b>Fluorene</b>	<b>0.0056</b>	<b>J</b>	0.036	0.0050	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	✳	01/19/23 13:31	01/23/23 17:32	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B03-2**

**Lab Sample ID: 500-228081-6**

Date Collected: 01/13/23 13:00

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 90.4

## 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>0.024</b>	<b>J</b>	0.036	0.0093	mg/Kg	☼	01/19/23 13:31	01/23/23 17:32	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	01/19/23 13:31	01/23/23 17:32	1
<b>Naphthalene</b>	<b>0.033</b>	<b>J</b>	0.036	0.0055	mg/Kg	☼	01/19/23 13:31	01/23/23 17:32	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	01/19/23 13:31	01/23/23 17:32	1
N-Nitrosodi-n-propylamine	<0.072		0.072	0.044	mg/Kg	☼	01/19/23 13:31	01/23/23 17:32	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	01/19/23 13:31	01/23/23 17:32	1
Pentachlorophenol	<0.72		0.72	0.58	mg/Kg	☼	01/19/23 13:31	01/23/23 17:32	1
<b>Phenanthrene</b>	<b>0.23</b>		0.036	0.0050	mg/Kg	☼	01/19/23 13:31	01/23/23 17:32	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	01/19/23 13:31	01/23/23 17:32	1
<b>Pyrene</b>	<b>0.096</b>		0.036	0.0071	mg/Kg	☼	01/19/23 13:31	01/23/23 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	84		31 - 143	01/19/23 13:31	01/23/23 17:32	1
2-Fluorobiphenyl	77		43 - 145	01/19/23 13:31	01/23/23 17:32	1
2-Fluorophenol	103		31 - 166	01/19/23 13:31	01/23/23 17:32	1
Nitrobenzene-d5 (Surr)	68		37 - 147	01/19/23 13:31	01/23/23 17:32	1
Phenol-d5	84		30 - 153	01/19/23 13:31	01/23/23 17:32	1
Terphenyl-d14 (Surr)	96		42 - 157	01/19/23 13:31	01/23/23 17:32	1

## Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.018		0.018	0.0070	mg/Kg	☼	01/24/23 08:53	01/26/23 14:51	1
PCB-1221	<0.018		0.018	0.0070	mg/Kg	☼	01/24/23 08:53	01/26/23 14:51	1
PCB-1232	<0.018		0.018	0.0049	mg/Kg	☼	01/24/23 08:53	01/26/23 14:51	1
PCB-1242	<0.018		0.018	0.0070	mg/Kg	☼	01/24/23 08:53	01/26/23 14:51	1
PCB-1248	<0.018		0.018	0.0085	mg/Kg	☼	01/24/23 08:53	01/26/23 14:51	1
PCB-1254	<0.018		0.018	0.0061	mg/Kg	☼	01/24/23 08:53	01/26/23 14:51	1
PCB-1260	<0.018		0.018	0.0068	mg/Kg	☼	01/24/23 08:53	01/26/23 14:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	71		49 - 129	01/24/23 08:53	01/26/23 14:51	1
DCB Decachlorobiphenyl	91		37 - 121	01/24/23 08:53	01/26/23 14:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.51</b>	<b>J</b>	1.1	0.21	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
<b>Arsenic</b>	<b>3.6</b>		0.53	0.18	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
<b>Barium</b>	<b>23</b>		2.6	0.30	mg/Kg	☼	01/20/23 09:30	01/24/23 20:53	5
<b>Beryllium</b>	<b>0.37</b>		0.21	0.049	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
<b>Boron</b>	<b>12</b>		2.6	0.25	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
<b>Cadmium</b>	<b>0.32</b>		0.11	0.019	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
<b>Calcium</b>	<b>180000</b>		110	18	mg/Kg	☼	01/20/23 09:30	01/26/23 17:35	10
<b>Chromium</b>	<b>4.5</b>		0.53	0.26	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
<b>Cobalt</b>	<b>2.3</b>	<b>^1+</b>	0.26	0.069	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
<b>Copper</b>	<b>11</b>		0.53	0.15	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
<b>Iron</b>	<b>7800</b>	<b>B</b>	53	27	mg/Kg	☼	01/20/23 09:30	01/24/23 20:53	5
<b>Lead</b>	<b>14</b>		0.26	0.12	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
<b>Magnesium</b>	<b>100000</b>		26	13	mg/Kg	☼	01/20/23 09:30	01/24/23 20:53	5
<b>Manganese</b>	<b>140</b>		0.53	0.076	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
<b>Nickel</b>	<b>7.0</b>		0.53	0.15	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

**Client Sample ID: 2852V-47-B03-2**

**Lab Sample ID: 500-228081-6**

Date Collected: 01/13/23 13:00

Matrix: Solid

Date Received: 01/13/23 16:15

Percent Solids: 90.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Potassium</b>	<b>760</b>		26	9.3	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
Selenium	<0.53		0.53	0.31	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
Silver	<0.26		0.26	0.068	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
<b>Sodium</b>	<b>240</b>		53	7.8	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
<b>Thallium</b>	<b>0.27</b>	J	0.53	0.26	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
<b>Vanadium</b>	<b>6.8</b>		0.26	0.062	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	1
<b>Zinc</b>	<b>41</b>		1.1	0.46	mg/Kg	☼	01/20/23 09:30	01/24/23 00:28	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		01/26/23 17:59	01/27/23 15:30	1
Lead	<0.0075		0.0075	0.0075	mg/L		01/26/23 17:59	01/27/23 15:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		01/27/23 17:01	01/28/23 17:55	1
<b>Barium</b>	<b>0.066</b>	J	0.50	0.050	mg/L		01/27/23 17:01	01/28/23 17:55	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		01/27/23 17:01	01/28/23 17:55	1
Boron	<0.10		0.10	0.050	mg/L		01/27/23 17:01	01/28/23 17:55	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		01/27/23 17:01	01/28/23 17:55	1
<b>Calcium</b>	<b>16</b>		2.5	0.50	mg/L		01/27/23 17:01	01/28/23 17:55	1
<b>Chromium</b>	<b>0.019</b>	J	0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:55	1
Cobalt	<0.025		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:55	1
<b>Iron</b>	<b>18</b>		0.40	0.20	mg/L		01/27/23 17:01	01/28/23 17:55	1
<b>Lead</b>	<b>0.021</b>		0.0075	0.0075	mg/L		01/27/23 17:01	01/28/23 17:55	1
<b>Manganese</b>	<b>0.095</b>		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:55	1
<b>Nickel</b>	<b>0.015</b>	J	0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:55	1
<b>Potassium</b>	<b>4.2</b>		2.5	0.50	mg/L		01/27/23 17:01	01/28/23 17:55	1
Selenium	<0.050		0.050	0.020	mg/L		01/27/23 17:01	01/28/23 17:55	1
Silver	<0.025		0.025	0.010	mg/L		01/27/23 17:01	01/28/23 17:55	1
<b>Zinc</b>	<b>0.076</b>	J	0.50	0.020	mg/L		01/27/23 17:01	01/28/23 17:55	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		01/27/23 17:01	01/30/23 11:40	1
Thallium	<0.0020		0.0020	0.0020	mg/L		01/27/23 17:01	01/30/23 11:40	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		01/27/23 15:30	01/30/23 07:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.034</b>		0.017	0.0089	mg/Kg	☼	01/23/23 16:30	01/24/23 10:18	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total (SW846 9012B)</b>	<b>0.24</b>	J	0.58	0.22	mg/Kg	☼	01/19/23 11:51	01/19/23 13:21	1
<b>pH (SW846 9045D)</b>	<b>8.4</b>		0.2	0.2	SU			01/18/23 15:15	1

Eurofins Chicago

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance 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
^1+	Initial Calibration Verification (ICV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

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

## Glossary

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



# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228081-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	01-19-23



# 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 <del>TekLab, Inc.</del> <u>EuroFINS</u> Address <del>5445 Horseshoe Lake Road</del> <u>Gollinsville, IL 62234</u> Phone <del>877-344-1003</del> Contact <u>Shelly Hennessy</u> email <u>shennessy@teklabinc.com</u>	Project Name <u>AEG-007A</u> 500-228081 COC	COC No <u>1</u> of <u>2</u>
		Project No <u>PTB/No. 195-002/07A</u>	Lab Job No <u>500-228081</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	Sample Temp <u>29-30</u> <u>43-7 34</u>
		Sampler: <u>N. Cove LS, Whodaci</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	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization	Comments
1	2852V-47-B01-1	1/13	1210	S	X	X				X	X	X	X	X	X		
2	2852V-47-B01-2		1220	S	X	X				X	X	X	X	X	X		
3	2852V-47-B02-1		1230	S	X	X				X	X	X	X	X	X		
4	2852V-47-B02-2		1240	S	X	X				X	X	X	X	X	X		
5	2852V-47-B03-1		1250	S	X	X				X	X	X	X	X	X		
6	2852V-47-B03-2		1300	S	X	X				X	X	X	X	X	X		
	2852V-47			S	X	X				X	X	X	X	X	X		
	2852V-47			S	X	X				X	X	X	X	X	X		
	2852V-47			S	X	X				X	X	X	X	X	X		
	2852V-47			S	X	X				X	X	X	X	X	X		
	2852V-47			S	X	X				X	X	X	X	X	X		
	2852V-47			S	X	X				X	X	X	X	X	X		

Relinquished by <u>[Signature]</u>	Date/Time <u>1/13 15 10</u>	Received by <u>[Signature]</u>	Date/Time <u>1/13/23 1570</u>
Relinquished by <u>[Signature]</u>	Date/Time <u>1/13/23 1615</u>	Received by <u>Stephane Hernandez EEA</u>	Date/Time <u>1/13/23 1615</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

Page 69 of 72

<b>Client Information (Sub Contract Lab)</b>				Sampler: Wright, Richard	Lab PM: Wright, Richard	Carrier Tracking No(s):	COC No: 500-169793.1	
Client Contact: Shipping/Receiving		Phone:		E-Mail: Richard.Wright@et.eurofinsus.com	State of Origin: Illinois	Page: Page 1 of 1		
Company: Eurofins Environment Testing North Centr				Accreditations Required (See note): NELAP - Illinois			Job #: 500-228081-1	
Address: 180 S. Van Buren Avenue.		Due Date Requested: 1/26/2023		<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: Barberton		TAT Requested (days):		Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)		Total Number of containers	
State, Zip: OH, 44203		PO #:		9012B/9012B_Prep Cyanide, Total				
Phone: 330-497-9396(Tel) 330-497-0772(Fax)		WO #:						
Email:		Project #: 50021033						
Project Name: IDOT - AE8-007		SSOW#:						
Site:								
<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>Matrix (W=water, S=solid, D=waste/oil, BT=Tissue, A=Air)</b>	
Preservation Code:								
2852V-47-B01-1 (500-228081-1)				1/13/23	12:10 Central	Solid	X	
2852V-47-B01-2 (500-228081-2)				1/13/23	12:20 Central	Solid	X	
2852V-47-B02-1 (500-228081-3)				1/13/23	12:30 Central	Solid	X	
2852V-47-B02-2 (500-228081-4)				1/13/23	12:40 Central	Solid	X	
2852V-47-B03-1 (500-228081-5)				1/13/23	12:50 Central	Solid	X	
2852V-47-B03-2 (500-228081-6)				1/13/23	13:00 Central	Solid	X	

E169

Special Instructions/Note:

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> Unconfirmed				<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b> <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: 1/14/23 13:40	Company:	Received by:		Date/Time: 1-17-23 0915	Company: BETNC
Relinquished by:		Date/Time:	Company:	Received by:		Date/Time:	Company:
Relinquished by:		Date/Time:	Company:	Received by:		Date/Time:	Company:
Custody Seals Intact:	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:				
<input type="checkbox"/> Yes <input type="checkbox"/> No							

1/30/2023





# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 2/6/2023 1:48:46 PM

## JOB DESCRIPTION

IDOT - AE8-007

## JOB NUMBER

500-228412-1

# Eurofins Chicago

## Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

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  
2/6/2023 1:48:46 PM

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

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228412-1

**Client Sample ID: 2852V-47-B04-1**

**Lab Sample ID: 500-228412-1**

**Date Collected: 01/19/23 09:00**

**Matrix: Solid**

**Date Received: 01/20/23 12:01**

**Percent Solids: 78.7**

**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	0.00066	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
1,1,2,2-Tetrachloroethane	<0.0020		0.0020	0.00063	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
1,1,2-Trichloroethane	<0.0020		0.0020	0.00085	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
1,1-Dichloroethane	<0.0020		0.0020	0.00068	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
1,1-Dichloroethene	<0.0020		0.0020	0.00068	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
1,2-Dichloroethane	<0.0049		0.0049	0.0015	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
1,2-Dichloropropane	<0.0020		0.0020	0.00051	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
1,3-Dichloropropene, Total	<0.0020		0.0020	0.00069	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
2-Butanone (MEK)	<0.0049		0.0049	0.0022	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0015	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Acetone	<0.020		0.020	0.0086	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Benzene	<0.0020		0.0020	0.00050	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Bromodichloromethane	<0.0020		0.0020	0.00040	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Bromoform	<0.0020		0.0020	0.00058	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Bromomethane	<0.0049		0.0049	0.0019	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Carbon disulfide	<0.0049		0.0049	0.0010	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Carbon tetrachloride	<0.0020		0.0020	0.00057	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Chlorobenzene	<0.0020		0.0020	0.00073	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Chloroethane	<0.0049		0.0049	0.0015	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Chloroform	<0.0020		0.0020	0.00068	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Chloromethane	<0.0049	*	0.0049	0.0020	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
cis-1,2-Dichloroethene	<0.0020		0.0020	0.00055	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
cis-1,3-Dichloropropene	<0.0020		0.0020	0.00059	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Dibromochloromethane	<0.0020		0.0020	0.00064	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Ethylbenzene	<0.0020		0.0020	0.00094	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Methyl tert-butyl ether	<0.0020		0.0020	0.00058	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Methylene Chloride	<0.0049		0.0049	0.0019	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Styrene	<0.0020		0.0020	0.00060	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Tetrachloroethene	<0.0020		0.0020	0.00067	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Toluene	<0.0020		0.0020	0.00050	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
trans-1,2-Dichloroethene	<0.0020		0.0020	0.00087	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
trans-1,3-Dichloropropene	<0.0020		0.0020	0.00069	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Trichloroethene	<0.0020		0.0020	0.00067	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Vinyl chloride	<0.0020		0.0020	0.00087	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1
Xylenes, Total	<0.0039		0.0039	0.00063	mg/Kg	✱	01/20/23 18:03	01/24/23 15:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 134	01/20/23 18:03	01/24/23 15:42	1
4-Bromofluorobenzene (Surr)	108		75 - 131	01/20/23 18:03	01/24/23 15:42	1
Dibromofluoromethane	97		75 - 126	01/20/23 18:03	01/24/23 15:42	1
Toluene-d8 (Surr)	111		75 - 124	01/20/23 18:03	01/24/23 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	<0.21		0.21	0.045	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228412-1

**Client Sample ID: 2852V-47-B04-1**

**Lab Sample ID: 500-228412-1**

**Date Collected: 01/19/23 09:00**

**Matrix: Solid**

**Date Received: 01/20/23 12:01**

**Percent Solids: 78.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
2-Methylnaphthalene	<0.083		0.083	0.0076	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
4,6-Dinitro-2-methylphenol	<0.83		0.83	0.33	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
4-Chloroaniline	<0.83		0.83	0.19	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
<b>Acenaphthylene</b>	<b>0.026</b>	<b>J</b>	0.041	0.0055	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
<b>Anthracene</b>	<b>0.0087</b>	<b>J</b>	0.041	0.0069	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
<b>Benzo[a]anthracene</b>	<b>0.058</b>		0.041	0.0056	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
<b>Benzo[a]pyrene</b>	<b>0.089</b>		0.041	0.0080	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
<b>Benzo[b]fluoranthene</b>	<b>0.10</b>		0.041	0.0089	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
<b>Benzo[g,h,i]perylene</b>	<b>0.040</b>	<b>J</b>	0.041	0.013	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
<b>Benzo[k]fluoranthene</b>	<b>0.052</b>		0.041	0.012	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Carbazole	<0.21		0.21	0.10	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
<b>Chrysene</b>	<b>0.081</b>		0.041	0.011	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
<b>Dibenz(a,h)anthracene</b>	<b>0.012</b>	<b>J</b>	0.041	0.0080	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
<b>Fluoranthene</b>	<b>0.051</b>		0.041	0.0077	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	✱	01/30/23 14:43	01/31/23 17:52	1

Euofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228412-1

**Client Sample ID: 2852V-47-B04-1**

**Lab Sample ID: 500-228412-1**

**Date Collected: 01/19/23 09:00**

**Matrix: Solid**

**Date Received: 01/20/23 12:01**

**Percent Solids: 78.7**

## 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>0.041</b>		0.041	0.011	mg/Kg	✳	01/30/23 14:43	01/31/23 17:52	1
Isophorone	<0.21		0.21	0.046	mg/Kg	✳	01/30/23 14:43	01/31/23 17:52	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	✳	01/30/23 14:43	01/31/23 17:52	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	✳	01/30/23 14:43	01/31/23 17:52	1
N-Nitrosodi-n-propylamine	<0.083		0.083	0.051	mg/Kg	✳	01/30/23 14:43	01/31/23 17:52	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	✳	01/30/23 14:43	01/31/23 17:52	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	✳	01/30/23 14:43	01/31/23 17:52	1
<b>Phenanthrene</b>	<b>0.022</b>	<b>J</b>	0.041	0.0058	mg/Kg	✳	01/30/23 14:43	01/31/23 17:52	1
Phenol	<0.21		0.21	0.092	mg/Kg	✳	01/30/23 14:43	01/31/23 17:52	1
<b>Pyrene</b>	<b>0.060</b>		0.041	0.0082	mg/Kg	✳	01/30/23 14:43	01/31/23 17:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	92		31 - 143	01/30/23 14:43	01/31/23 17:52	1
2-Fluorobiphenyl	90		43 - 145	01/30/23 14:43	01/31/23 17:52	1
2-Fluorophenol	72		31 - 166	01/30/23 14:43	01/31/23 17:52	1
Nitrobenzene-d5 (Surr)	69		37 - 147	01/30/23 14:43	01/31/23 17:52	1
Phenol-d5	73		30 - 153	01/30/23 14:43	01/31/23 17:52	1
Terphenyl-d14 (Surr)	109		42 - 157	01/30/23 14:43	01/31/23 17:52	1

## Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.021		0.021	0.0082	mg/Kg	✳	01/25/23 08:31	01/27/23 16:05	1
PCB-1221	<0.021		0.021	0.0082	mg/Kg	✳	01/25/23 08:31	01/27/23 16:05	1
PCB-1232	<0.021		0.021	0.0056	mg/Kg	✳	01/25/23 08:31	01/27/23 16:05	1
PCB-1242	<0.021		0.021	0.0081	mg/Kg	✳	01/25/23 08:31	01/27/23 16:05	1
PCB-1248	<0.021		0.021	0.0099	mg/Kg	✳	01/25/23 08:31	01/27/23 16:05	1
PCB-1254	<0.021		0.021	0.0071	mg/Kg	✳	01/25/23 08:31	01/27/23 16:05	1
PCB-1260	<0.021		0.021	0.0079	mg/Kg	✳	01/25/23 08:31	01/27/23 16:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	72		49 - 129	01/25/23 08:31	01/27/23 16:05	1
DCB Decachlorobiphenyl	101		37 - 121	01/25/23 08:31	01/27/23 16:05	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	✳	01/31/23 09:40	02/01/23 20:57	1
<b>Arsenic</b>	<b>7.4</b>		0.61	0.21	mg/Kg	✳	01/31/23 09:40	02/01/23 20:57	1
<b>Barium</b>	<b>62</b>		3.0	0.35	mg/Kg	✳	01/31/23 09:40	02/02/23 17:34	5
<b>Beryllium</b>	<b>0.65</b>		0.24	0.057	mg/Kg	✳	01/31/23 09:40	02/01/23 20:57	1
<b>Boron</b>	<b>9.1</b>		3.0	0.28	mg/Kg	✳	01/31/23 09:40	02/01/23 20:57	1
<b>Cadmium</b>	<b>0.26</b>	<b>B</b>	0.12	0.022	mg/Kg	✳	01/31/23 09:40	02/01/23 20:57	1
<b>Calcium</b>	<b>84000</b>	<b>B</b>	61	10	mg/Kg	✳	01/31/23 09:40	02/02/23 17:34	5
<b>Chromium</b>	<b>12</b>		0.61	0.30	mg/Kg	✳	01/31/23 09:40	02/01/23 20:57	1
<b>Cobalt</b>	<b>7.8</b>		0.30	0.079	mg/Kg	✳	01/31/23 09:40	02/01/23 20:57	1
<b>Copper</b>	<b>15</b>		0.61	0.17	mg/Kg	✳	01/31/23 09:40	02/01/23 20:57	1
<b>Iron</b>	<b>17000</b>	<b>B</b>	61	32	mg/Kg	✳	01/31/23 09:40	02/02/23 17:34	5
<b>Lead</b>	<b>25</b>		0.30	0.14	mg/Kg	✳	01/31/23 09:40	02/01/23 20:57	1
<b>Magnesium</b>	<b>53000</b>	<b>B</b>	30	15	mg/Kg	✳	01/31/23 09:40	02/02/23 17:34	5
<b>Manganese</b>	<b>200</b>		0.61	0.088	mg/Kg	✳	01/31/23 09:40	02/01/23 20:57	1
<b>Nickel</b>	<b>17</b>		0.61	0.18	mg/Kg	✳	01/31/23 09:40	02/01/23 20:57	1

Eurofins Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228412-1

**Client Sample ID: 2852V-47-B04-1**

**Lab Sample ID: 500-228412-1**

Date Collected: 01/19/23 09:00

Matrix: Solid

Date Received: 01/20/23 12:01

Percent Solids: 78.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Potassium</b>	<b>1600</b>		30	11	mg/Kg	☼	01/31/23 09:40	02/01/23 20:57	1
Selenium	<0.61		0.61	0.36	mg/Kg	☼	01/31/23 09:40	02/01/23 20:57	1
<b>Silver</b>	<b>0.22</b>	<b>J</b>	0.30	0.078	mg/Kg	☼	01/31/23 09:40	02/01/23 20:57	1
<b>Sodium</b>	<b>2700</b>		61	9.0	mg/Kg	☼	01/31/23 09:40	02/01/23 20:57	1
Thallium	<0.61		0.61	0.30	mg/Kg	☼	01/31/23 09:40	02/01/23 20:57	1
<b>Vanadium</b>	<b>19</b>	<b>B</b>	0.30	0.072	mg/Kg	☼	01/31/23 09:40	02/01/23 20:57	1
<b>Zinc</b>	<b>57</b>		1.2	0.53	mg/Kg	☼	01/31/23 09:40	02/01/23 20:57	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		02/02/23 16:19	02/03/23 14:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/02/23 16:19	02/03/23 14:01	1
Chromium	<0.025		0.025	0.010	mg/L		02/02/23 16:19	02/03/23 14:01	1
Iron	<0.40		0.40	0.20	mg/L		02/02/23 16:19	02/03/23 14:01	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/02/23 16:19	02/03/23 14:01	1
<b>Manganese</b>	<b>0.19</b>		0.025	0.010	mg/L		02/02/23 16:19	02/03/23 14:01	1
Nickel	<0.025		0.025	0.010	mg/L		02/02/23 16:19	02/03/23 14:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.057</b>		0.050	0.010	mg/L		02/02/23 16:20	02/03/23 15:22	1
<b>Barium</b>	<b>0.53</b>		0.50	0.050	mg/L		02/02/23 16:20	02/03/23 15:22	1
<b>Beryllium</b>	<b>0.0070</b>		0.0040	0.0040	mg/L		02/02/23 16:20	02/03/23 15:22	1
<b>Boron</b>	<b>0.14</b>		0.10	0.050	mg/L		02/02/23 16:20	02/03/23 15:22	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/02/23 16:20	02/03/23 15:22	1
<b>Calcium</b>	<b>18</b>		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 15:22	1
<b>Chromium</b>	<b>0.15</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:22	1
<b>Cobalt</b>	<b>0.041</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:22	1
<b>Iron</b>	<b>130</b>		0.40	0.20	mg/L		02/02/23 16:20	02/03/23 15:22	1
<b>Lead</b>	<b>0.11</b>		0.0075	0.0075	mg/L		02/02/23 16:20	02/03/23 15:22	1
<b>Manganese</b>	<b>0.66</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:22	1
<b>Nickel</b>	<b>0.14</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:22	1
<b>Potassium</b>	<b>23</b>		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 15:22	1
Selenium	<0.050		0.050	0.020	mg/L		02/02/23 16:20	02/03/23 15:22	1
Silver	<0.025	^+	0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:22	1
<b>Zinc</b>	<b>0.52</b>		0.50	0.020	mg/L		02/02/23 16:20	02/03/23 15:22	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		02/02/23 16:19	02/03/23 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		02/02/23 16:20	02/03/23 13:37	1
<b>Thallium</b>	<b>0.0032</b>		0.0020	0.0020	mg/L		02/02/23 16:20	02/03/23 13:37	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		02/02/23 15:15	02/03/23 11:12	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
 Project/Site: IDOT - AE8-007

Job ID: 500-228412-1

**Client Sample ID: 2852V-47-B04-1**

**Lab Sample ID: 500-228412-1**

Date Collected: 01/19/23 09:00

Matrix: Solid

Date Received: 01/20/23 12:01

Percent Solids: 78.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.019	0.010	mg/Kg	☼	01/31/23 13:30	02/01/23 08:25	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.64		0.64	0.24	mg/Kg	☼	01/25/23 14:22	01/25/23 15:26	1
pH (SW846 9045D)	8.2		0.2	0.2	SU			01/25/23 18:45	1



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228412-1

**Client Sample ID: 2852V-47-B07**

**Lab Sample ID: 500-228412-4**

**Date Collected: 01/19/23 10:00**

**Matrix: Solid**

**Date Received: 01/20/23 12:01**

**Percent Solids: 84.6**

**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	0.00056	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00053	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00071	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
1,1-Dichloroethane	<0.0017		0.0017	0.00057	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
1,1-Dichloroethene	<0.0017		0.0017	0.00057	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
1,2-Dichloropropane	<0.0017		0.0017	0.00043	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00058	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
2-Butanone (MEK)	<0.0041		0.0041	0.0018	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Acetone	<0.017		0.017	0.0072	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Benzene	<0.0017		0.0017	0.00042	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Bromodichloromethane	<0.0017		0.0017	0.00034	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Bromoform	<0.0017		0.0017	0.00048	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Carbon disulfide	<0.0041		0.0041	0.00086	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Carbon tetrachloride	<0.0017		0.0017	0.00048	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Chlorobenzene	<0.0017		0.0017	0.00061	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Chloroform	<0.0017		0.0017	0.00058	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Chloromethane	<0.0041	*	0.0041	0.0017	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00046	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00050	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Dibromochloromethane	<0.0017		0.0017	0.00054	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Ethylbenzene	<0.0017		0.0017	0.00079	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00049	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Styrene	<0.0017		0.0017	0.00050	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Tetrachloroethene	<0.0017		0.0017	0.00056	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Toluene	<0.0017		0.0017	0.00042	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00073	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00058	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Trichloroethene	<0.0017		0.0017	0.00056	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Vinyl chloride	<0.0017		0.0017	0.00073	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	✳	01/20/23 18:03	01/24/23 16:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		70 - 134	01/20/23 18:03	01/24/23 16:51	1
4-Bromofluorobenzene (Surr)	110		75 - 131	01/20/23 18:03	01/24/23 16:51	1
Dibromofluoromethane	100		75 - 126	01/20/23 18:03	01/24/23 16:51	1
Toluene-d8 (Surr)	112		75 - 124	01/20/23 18:03	01/24/23 16:51	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	✳	01/30/23 14:43	01/31/23 16:27	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228412-1

**Client Sample ID: 2852V-47-B07**

**Lab Sample ID: 500-228412-4**

**Date Collected: 01/19/23 10:00**

**Matrix: Solid**

**Date Received: 01/20/23 12:01**

**Percent Solids: 84.6**

**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	0.085	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
2,4-Dichlorophenol	<0.37		0.37	0.089	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
2,4-Dinitrophenol	<0.75		0.75	0.66	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
2-Methylnaphthalene	<0.075		0.075	0.0069	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
2-Methylphenol	<0.19		0.19	0.060	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
2-Nitrophenol	<0.37		0.37	0.088	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.049	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
4-Chloroaniline	<0.75		0.75	0.18	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
4-Nitrophenol	<0.75		0.75	0.36	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
<b>Benzo[a]anthracene</b>	<b>0.0079</b>	<b>J</b>	0.037	0.0050	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
<b>Benzo[b]fluoranthene</b>	<b>0.0086</b>	<b>J</b>	0.037	0.0081	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Butyl benzyl phthalate	<0.19		0.19	0.071	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Carbazole	<0.19		0.19	0.093	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Chrysene	<0.037		0.037	0.010	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Di-n-octyl phthalate	<0.19		0.19	0.061	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
<b>Fluoranthene</b>	<b>0.0098</b>	<b>J</b>	0.037	0.0069	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Hexachlorobenzene	<0.075		0.075	0.0087	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Hexachlorocyclopentadiene	<0.75		0.75	0.22	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228412-1

**Client Sample ID: 2852V-47-B07**

**Lab Sample ID: 500-228412-4**

**Date Collected: 01/19/23 10:00**

**Matrix: Solid**

**Date Received: 01/20/23 12:01**

**Percent Solids: 84.6**

**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	✳	01/30/23 14:43	01/31/23 16:27	1
Isophorone	<0.19		0.19	0.042	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Nitrobenzene	<0.037		0.037	0.0093	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
N-Nitrosodi-n-propylamine	<0.075		0.075	0.046	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Pentachlorophenol	<0.75		0.75	0.60	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Phenanthrene	<0.037		0.037	0.0052	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
Phenol	<0.19		0.19	0.083	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1
<b>Pyrene</b>	<b>0.010</b>	<b>J</b>	0.037	0.0074	mg/Kg	✳	01/30/23 14:43	01/31/23 16:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	84		31 - 143	01/30/23 14:43	01/31/23 16:27	1
2-Fluorobiphenyl	81		43 - 145	01/30/23 14:43	01/31/23 16:27	1
2-Fluorophenol	74		31 - 166	01/30/23 14:43	01/31/23 16:27	1
Nitrobenzene-d5 (Surr)	66		37 - 147	01/30/23 14:43	01/31/23 16:27	1
Phenol-d5	70		30 - 153	01/30/23 14:43	01/31/23 16:27	1
Terphenyl-d14 (Surr)	107		42 - 157	01/30/23 14:43	01/31/23 16:27	1

**Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	<0.020		0.020	0.0077	mg/Kg	✳	01/25/23 08:31	01/27/23 16:50	1
PCB-1221	<0.020		0.020	0.0077	mg/Kg	✳	01/25/23 08:31	01/27/23 16:50	1
PCB-1232	<0.020		0.020	0.0053	mg/Kg	✳	01/25/23 08:31	01/27/23 16:50	1
PCB-1242	<0.020		0.020	0.0076	mg/Kg	✳	01/25/23 08:31	01/27/23 16:50	1
PCB-1248	<0.020		0.020	0.0093	mg/Kg	✳	01/25/23 08:31	01/27/23 16:50	1
PCB-1254	<0.020		0.020	0.0066	mg/Kg	✳	01/25/23 08:31	01/27/23 16:50	1
PCB-1260	<0.020		0.020	0.0074	mg/Kg	✳	01/25/23 08:31	01/27/23 16:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	82		49 - 129	01/25/23 08:31	01/27/23 16:50	1
DCB Decachlorobiphenyl	113		37 - 121	01/25/23 08:31	01/27/23 16:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.29</b>	<b>J B</b>	1.1	0.22	mg/Kg	✳	01/31/23 09:40	02/01/23 21:13	1
<b>Arsenic</b>	<b>8.6</b>		0.56	0.19	mg/Kg	✳	01/31/23 09:40	02/01/23 21:13	1
<b>Barium</b>	<b>54</b>		2.8	0.32	mg/Kg	✳	01/31/23 09:40	02/02/23 17:43	5
<b>Beryllium</b>	<b>0.52</b>		0.22	0.052	mg/Kg	✳	01/31/23 09:40	02/01/23 21:13	1
<b>Boron</b>	<b>6.6</b>		2.8	0.26	mg/Kg	✳	01/31/23 09:40	02/01/23 21:13	1
<b>Cadmium</b>	<b>0.41</b>	<b>B</b>	0.11	0.020	mg/Kg	✳	01/31/23 09:40	02/01/23 21:13	1
<b>Calcium</b>	<b>80000</b>	<b>B</b>	56	9.4	mg/Kg	✳	01/31/23 09:40	02/02/23 17:43	5
<b>Chromium</b>	<b>9.8</b>		0.56	0.28	mg/Kg	✳	01/31/23 09:40	02/01/23 21:13	1
<b>Cobalt</b>	<b>5.3</b>		0.28	0.073	mg/Kg	✳	01/31/23 09:40	02/01/23 21:13	1
<b>Copper</b>	<b>25</b>		0.56	0.16	mg/Kg	✳	01/31/23 09:40	02/01/23 21:13	1
<b>Iron</b>	<b>19000</b>	<b>B</b>	56	29	mg/Kg	✳	01/31/23 09:40	02/02/23 17:43	5
<b>Lead</b>	<b>45</b>		0.28	0.13	mg/Kg	✳	01/31/23 09:40	02/01/23 21:13	1
<b>Magnesium</b>	<b>49000</b>	<b>B</b>	28	14	mg/Kg	✳	01/31/23 09:40	02/02/23 17:43	5
<b>Manganese</b>	<b>190</b>		0.56	0.081	mg/Kg	✳	01/31/23 09:40	02/01/23 21:13	1
<b>Nickel</b>	<b>14</b>		0.56	0.16	mg/Kg	✳	01/31/23 09:40	02/01/23 21:13	1

Eurofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228412-1

**Client Sample ID: 2852V-47-B07**

**Lab Sample ID: 500-228412-4**

Date Collected: 01/19/23 10:00

Matrix: Solid

Date Received: 01/20/23 12:01

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Potassium</b>	<b>1100</b>		28	9.9	mg/Kg	☼	01/31/23 09:40	02/01/23 21:13	1
Selenium	<0.56		0.56	0.33	mg/Kg	☼	01/31/23 09:40	02/01/23 21:13	1
<b>Silver</b>	<b>0.25</b>	<b>J</b>	0.28	0.072	mg/Kg	☼	01/31/23 09:40	02/01/23 21:13	1
<b>Sodium</b>	<b>2300</b>		56	8.3	mg/Kg	☼	01/31/23 09:40	02/01/23 21:13	1
Thallium	<0.56		0.56	0.28	mg/Kg	☼	01/31/23 09:40	02/01/23 21:13	1
<b>Vanadium</b>	<b>14</b>	<b>B</b>	0.28	0.066	mg/Kg	☼	01/31/23 09:40	02/01/23 21:13	1
<b>Zinc</b>	<b>92</b>		1.1	0.49	mg/Kg	☼	01/31/23 09:40	02/01/23 21:13	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		02/02/23 16:19	02/03/23 14:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		02/02/23 16:19	02/03/23 14:10	1
Chromium	<0.025		0.025	0.010	mg/L		02/02/23 16:19	02/03/23 14:10	1
Iron	<0.40		0.40	0.20	mg/L		02/02/23 16:19	02/03/23 14:10	1
Lead	<0.0075		0.0075	0.0075	mg/L		02/02/23 16:19	02/03/23 14:10	1
<b>Manganese</b>	<b>0.25</b>		0.025	0.010	mg/L		02/02/23 16:19	02/03/23 14:10	1
Nickel	<0.025		0.025	0.010	mg/L		02/02/23 16:19	02/03/23 14:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.070</b>		0.050	0.010	mg/L		02/02/23 16:20	02/03/23 15:37	1
<b>Barium</b>	<b>0.45</b>	<b>J</b>	0.50	0.050	mg/L		02/02/23 16:20	02/03/23 15:37	1
<b>Beryllium</b>	<b>0.0093</b>		0.0040	0.0040	mg/L		02/02/23 16:20	02/03/23 15:37	1
<b>Boron</b>	<b>0.18</b>		0.10	0.050	mg/L		02/02/23 16:20	02/03/23 15:37	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		02/02/23 16:20	02/03/23 15:37	1
<b>Calcium</b>	<b>18</b>		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 15:37	1
<b>Chromium</b>	<b>0.20</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:37	1
<b>Cobalt</b>	<b>0.064</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:37	1
<b>Iron</b>	<b>230</b>		0.40	0.20	mg/L		02/02/23 16:20	02/03/23 15:37	1
<b>Lead</b>	<b>0.12</b>		0.0075	0.0075	mg/L		02/02/23 16:20	02/03/23 15:37	1
<b>Manganese</b>	<b>1.5</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:37	1
<b>Nickel</b>	<b>0.17</b>		0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:37	1
<b>Potassium</b>	<b>25</b>		2.5	0.50	mg/L		02/02/23 16:20	02/03/23 15:37	1
Selenium	<0.050		0.050	0.020	mg/L		02/02/23 16:20	02/03/23 15:37	1
Silver	<0.025	^+	0.025	0.010	mg/L		02/02/23 16:20	02/03/23 15:37	1
<b>Zinc</b>	<b>0.62</b>		0.50	0.020	mg/L		02/02/23 16:20	02/03/23 15:37	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		02/02/23 16:19	02/03/23 15:30	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		02/02/23 16:20	02/03/23 13:48	1
<b>Thallium</b>	<b>0.0039</b>		0.0020	0.0020	mg/L		02/02/23 16:20	02/03/23 13:48	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		02/02/23 15:15	02/03/23 11:18	1

Euofins Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228412-1

**Client Sample ID: 2852V-47-B07**

**Lab Sample ID: 500-228412-4**

Date Collected: 01/19/23 10:00

Matrix: Solid

Date Received: 01/20/23 12:01

Percent Solids: 84.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.017	0.0092	mg/Kg	☆	01/31/23 13:30	02/01/23 08:32	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	<0.62		0.62	0.23	mg/Kg	☆	01/25/23 14:28	01/25/23 15:34	1
pH (SW846 9045D)	8.0		0.2	0.2	SU			01/25/23 18:55	1





# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228412-1

## Qualifiers

### GC/MS VOA

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

### GC/MS Semi VOA

Qualifier	Qualifier Description
*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 Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

### Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

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

## Glossary

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



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE8-007

Job ID: 500-228412-1

## Glossary (Continued)

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

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 - AE8-007

Job ID: 500-228412-1

## 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	12-31-23
Michigan	State	9135	02-27-23
Minnesota	NELAP	039-999-348	12-31-23
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
West Virginia DEP	State	210	12-31-23



# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> <span style="float:right">500-228412 COC</span>		Project Name <u>AE8-007A</u>	
Andrews Engineering, Inc 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact Colleen Grey email cgrey@andrews-eng.com		COC No <u>1</u> of <u>1</u>	
Lab <del>TekLab, Inc.</del> <u>EuroFIN</u>		Project No <u>PTB/wa 145-002/07A</u>	
Address <del>5448 Horseshoe Lake Road</del> <u>Collinsville, IL 62234</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	
Phone <del>877-344-1003</del>		Lab Job No <u>500 - 228412</u>	
Contact <del>Shelley Hennessy</del>		Sample Temp <u>4.3 - 3.4</u>	
email <del>shennessy@tekfabinc.com</del>		Sampler: <u>N. Coe</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															
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAS	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	*** Cyanide	pH	% Solids	Waste Characterization				
1	2852V-47-B04-1	1/19	0900	S	X	X				X	X	X	X	X	X					
2	2852V-47-B05		0920	S	X	X				X	X	X	X	X	X					
3	2852V-47-B06-1		0940	S	X	X				X	X	X	X	X	X					
4	2852V-47-B07		1000	S	X	X				X	X	X	X	X	X					
5	2852V-47-B08-1		1015	S	X	X				X	X	X	X	X	X					
6	2852V-47-B08-2		1030	S	X	X				X	X	X	X	X	X					
7	2852V-47-B09-1		1100	S	X	X				X	X	X	X	X	X					
8	2852V-47-B09-2	↓	1110	S	X	X				X	X	X	X	X	X					
9	Trip Blank #4				X															

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

**Comments**  
 B04-2 not sampled  
 B06-2 not sampled

Relinquished by <u>N. Coe</u>	Date/Time <u>1/20/23 1110</u>	Received by <u>M. J. Elmer</u>	Date/Time <u>1/20/23 1110</u>
Relinquished by <u>M. J. Elmer</u>	Date/Time <u>1/30/22 1201</u>	Received by <u>[Signature]</u>	Date/Time <u>1/20/23 1201</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

<b>Client Information (Sub Contract Lab)</b>	Sampler: Wright, Richard	Lab PM: Wright, Richard	Carrier Tracking No(s):	COC No: 500-169990.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Richard.Wright@et.eurofinsus.com	State of Origin: Illinois	Page: Page 1 of 1

Company: Eurofins Environment Testing North Centr	Accreditations Required (See note): NELAP - Illinois	Job #: 500-228412-1
------------------------------------------------------	---------------------------------------------------------	------------------------

Address: 180 S. Van Buren Avenue.	Due Date Requested: 2/2/2023	<b>Analysis Requested</b>	<b>Preservation Codes:</b>	
City: Barberton	TAT Requested (days):			A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify)
State, Zip: OH, 44203	PO #:			
Phone: 330-497-9396(Tel) 330-497-0772(Fax)	WO #:			
Email:				
Project Name: IDOT - AE8-007	Project #: 50021033			
Site:	SSOW#:			

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 Cyanide, Total	Total Number of containers	Special Instructions/Note:
2852V-47-B04-1 (500-228412-1)	1/19/23	09:00 Central		Solid		X		1	<b>E176</b>
2852V-47-B05 (500-228412-2)	1/19/23	09:20 Central		Solid		X		1	
2852V-47-B06-1 (500-228412-3)	1/19/23	09:40 Central		Solid		X		1	
2852V-47-B07 (500-228412-4)	1/19/23	10:00 Central		Solid		X		1	
2852V-47-B08-1 (500-228412-5)	1/19/23	10:15 Central		Solid		X		1	
2852V-47-B08-2 (500-228412-6)	1/19/23	10:30 Central		Solid		X		1	
2852V-47-B09-1 (500-228412-7)	1/19/23	11:00 Central		Solid		X		1	
2852V-47-B09-2 (500-228412-8)	1/19/23	11:10 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:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
----------------------------	-------	-------	---------------------

Relinquished by: <i>Shirley Scott</i>	Date/Time: <i>1/23/23 0900</i>	Company:	Received by: <i>Rachelle Howard</i>	Date/Time: <i>1-24-23 9:30</i>	Company: <i>ETMC</i>
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
-------------------------------------	-------------------	---------------------------------------------

Page 93 of 95

2/6/2023

