



# Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • IL • 62794-9276

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

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

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

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

### I. Source Location Information

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

Project Name: FAP 337 (IL 22) & FAP 338 (IL 59) Office Phone Number, if available: \_\_\_\_\_

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

26 Honey Lake Road and 55 East Blanche Court

City: North Barrington State: IL Zip Code: 60010

County: Lake Township: Cuba

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

Latitude: 42.19056 Longitude: -88.12927

(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: \_\_\_\_\_

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

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

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

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

City: Schaumburg State: IL

City: Schaumburg State: IL

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

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

Contact: Kristine A. Kutscher

Contact: Kristine A. Kutscher

Email, if available: Kristine.Kutscher@illinois.gov

Email, if available: Kristine.Kutscher@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 additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 337 (IL 22) & FAP 338 (IL 59)

Latitude: 42.19056 Longitude: -88.12927

Uncontaminated Site 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 approximately located 35 Ill. Adm. Code 1100.610(a):

LOCATION 3382-4-B01 WAS SAMPLED ADJACENT TO SITE 3082-4 SEE TABLE 3a AND FIGURE 2 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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


TESTAMERICA ANALYTICAL REPORT - JOB ID NUMBER: 500-145966-5

**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:

October 19, 2018  
 Date:



**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

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.

**ISGS Site 3082-4  
Residences**

Sample ID	3082-4-B01-1	3082-4-B01-2	Maximum Allowable Concentration				
Sample Depth (ft)	0-8	8-16					
Sample Date	5/24/2018	5/24/2018					
PID	0	0					
Sample pH	8.3	6.9					
Matrix	Soil	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>							

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

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

TestAmerica Job ID: 500-145966-5  
Client Project/Site: IDOT - AE7-04

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

Attn: Ms. Colleen Grey



Authorized for release by:  
6/12/2018 3:40:16 PM

Richard Wright, Senior Project Manager  
(708)534-5200  
[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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

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# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-5

**Client Sample ID: 3082-4-B01-1**

**Lab Sample ID: 500-145966-11**

**Date Collected: 05/24/18 12:40**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 84.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00051	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00065	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
1,1-Dichloroethane	<0.0015		0.0015	0.00052	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
1,1-Dichloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
1,2-Dichloroethane	<0.0038		0.0038	0.0012	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
1,2-Dichloropropane	<0.0015		0.0015	0.00039	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00053	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
2-Butanone (MEK)	<0.0038		0.0038	0.0017	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
2-Hexanone	<0.0038		0.0038	0.0012	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
4-Methyl-2-pentanone (MIBK)	<0.0038		0.0038	0.0011	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
<b>Acetone</b>	<b>0.0093</b>	<b>J</b>	0.015	0.0066	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Benzene	<0.0015		0.0015	0.00039	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Bromodichloromethane	<0.0015		0.0015	0.00031	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Bromoform	<0.0015		0.0015	0.00044	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Bromomethane	<0.0038		0.0038	0.0014	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Carbon disulfide	<0.0038		0.0038	0.00079	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Carbon tetrachloride	<0.0015		0.0015	0.00044	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Chlorobenzene	<0.0015		0.0015	0.00056	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Chloroethane	<0.0038		0.0038	0.0011	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Chloroform	<0.0015		0.0015	0.00053	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Chloromethane	<0.0038		0.0038	0.0015	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00042	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Dibromochloromethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Ethylbenzene	<0.0015		0.0015	0.00073	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00045	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Methylene Chloride	<0.0038		0.0038	0.0015	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Styrene	<0.0015		0.0015	0.00046	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Tetrachloroethene	<0.0015		0.0015	0.00052	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Toluene	<0.0015		0.0015	0.00038	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00067	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00053	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Trichloroethene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Vinyl chloride	<0.0015		0.0015	0.00067	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1
Xylenes, Total	<0.0030		0.0030	0.00049	mg/Kg	☼	05/25/18 17:06	05/30/18 17:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	05/25/18 17:06	05/30/18 17:18	1
4-Bromofluorobenzene (Surr)	100		75 - 131	05/25/18 17:06	05/30/18 17:18	1
Dibromofluoromethane	83		75 - 126	05/25/18 17:06	05/30/18 17:18	1
Toluene-d8 (Surr)	93		75 - 124	05/25/18 17:06	05/30/18 17:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-5

**Client Sample ID: 3082-4-B01-1**

**Lab Sample ID: 500-145966-11**

**Date Collected: 05/24/18 12:40**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 84.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
2-Methylnaphthalene	<0.077		0.077	0.0070	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
4,6-Dinitro-2-methylphenol	<0.77		0.77	0.31	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
<b>Benzo[a]anthracene</b>	<b>0.0054 J</b>		0.038	0.0051	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Carbazole	<0.19		0.19	0.095	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-5

**Client Sample ID: 3082-4-B01-1**

**Lab Sample ID: 500-145966-11**

**Date Collected: 05/24/18 12:40**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 84.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
N-Nitrosodi-n-propylamine	<0.077		0.077	0.046	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
<b>Phenanthrene</b>	<b>0.0057</b>	<b>J</b>	0.038	0.0053	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Phenol	<0.19		0.19	0.085	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
<b>Pyrene</b>	<b>0.021</b>	<b>J</b>	0.038	0.0076	mg/Kg	☼	06/02/18 23:39	06/06/18 15:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	64		25 - 139				06/02/18 23:39	06/06/18 15:36	1
2-Fluorobiphenyl	80		44 - 121				06/02/18 23:39	06/06/18 15:36	1
2-Fluorophenol	103		46 - 133				06/02/18 23:39	06/06/18 15:36	1
Nitrobenzene-d5	75		41 - 120				06/02/18 23:39	06/06/18 15:36	1
Phenol-d5	89		46 - 125				06/02/18 23:39	06/06/18 15:36	1
Terphenyl-d14	104		35 - 160				06/02/18 23:39	06/06/18 15:36	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Arsenic</b>	<b>7.7</b>		0.53	0.18	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Barium</b>	<b>29</b>		0.53	0.061	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Beryllium</b>	<b>0.52</b>		0.21	0.050	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Boron</b>	<b>8.8</b>		2.7	0.25	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Cadmium</b>	<b>0.25</b>	<b>B</b>	0.11	0.019	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Calcium</b>	<b>98000</b>		110	18	mg/Kg	☼	05/29/18 06:48	05/30/18 18:17	10
<b>Chromium</b>	<b>12</b>		0.53	0.26	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Cobalt</b>	<b>8.5</b>		0.27	0.070	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Copper</b>	<b>21</b>		0.53	0.15	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Iron</b>	<b>16000</b>		11	5.6	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Lead</b>	<b>13</b>		0.27	0.12	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Magnesium</b>	<b>30000</b>		5.3	2.7	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Manganese</b>	<b>320</b>		0.53	0.077	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Nickel</b>	<b>22</b>		0.53	0.16	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Potassium</b>	<b>1600</b>		27	9.5	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Selenium</b>	<b>0.32</b>	<b>J</b>	0.53	0.31	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Silver</b>	<b>0.15</b>	<b>J</b>	0.27	0.069	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Sodium</b>	<b>1600</b>		53	7.9	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
Thallium	<0.53		0.53	0.27	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Vanadium</b>	<b>15</b>		0.27	0.063	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1
<b>Zinc</b>	<b>57</b>		1.1	0.47	mg/Kg	☼	05/29/18 06:48	05/30/18 04:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/30/18 09:01	05/30/18 18:26	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/18 09:01	05/30/18 18:26	1
Chromium	<0.025		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:26	1
Iron	<0.40		0.40	0.20	mg/L		05/30/18 09:01	05/30/18 18:26	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-5

**Client Sample ID: 3082-4-B01-1**

**Lab Sample ID: 500-145966-11**

**Date Collected: 05/24/18 12:40**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 84.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		05/30/18 09:01	05/30/18 18:26	1
<b>Manganese</b>	<b>0.31</b>		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:26	1
Nickel	<0.025		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.10</b>		0.050	0.010	mg/L		05/30/18 14:20	05/31/18 22:37	1
<b>Barium</b>	<b>0.68</b>		0.50	0.050	mg/L		05/30/18 14:20	05/31/18 22:37	1
<b>Beryllium</b>	<b>0.011</b>		0.0040	0.0040	mg/L		05/30/18 14:20	05/31/18 22:37	1
<b>Boron</b>	<b>0.24</b>		0.10	0.050	mg/L		05/30/18 14:20	05/31/18 22:37	1
<b>Cadmium</b>	<b>0.0033</b>	<b>J</b>	0.0050	0.0020	mg/L		05/30/18 14:20	05/31/18 22:37	1
<b>Calcium</b>	<b>48</b>		2.5	0.50	mg/L		05/30/18 14:20	05/31/18 22:37	1
<b>Chromium</b>	<b>0.25</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:37	1
<b>Cobalt</b>	<b>0.089</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:37	1
<b>Iron</b>	<b>270</b>	<b>B</b>	0.40	0.20	mg/L		05/30/18 14:20	05/31/18 22:37	1
<b>Lead</b>	<b>0.16</b>		0.0075	0.0075	mg/L		05/30/18 14:20	05/31/18 22:37	1
<b>Manganese</b>	<b>1.4</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:37	1
<b>Nickel</b>	<b>0.29</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:37	1
<b>Potassium</b>	<b>48</b>		2.5	0.50	mg/L		05/30/18 14:20	05/31/18 22:37	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/18 14:20	05/31/18 22:37	1
Silver	<0.025		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:37	1
<b>Zinc</b>	<b>0.74</b>		0.50	0.020	mg/L		05/30/18 14:20	05/31/18 22:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/18 09:01	06/04/18 21:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/18 14:20	06/01/18 17:21	1
<b>Thallium</b>	<b>0.0052</b>		0.0020	0.0020	mg/L		05/30/18 14:20	05/31/18 16:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.00021</b>		0.00020	0.00020	mg/L		05/31/18 12:20	06/01/18 16:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.087</b>	<b>F1</b>	0.018	0.0061	mg/Kg	☼	05/30/18 13:25	05/31/18 15:27	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	06/07/18 14:30	06/07/18 18:17	1
<b>pH</b>	<b>8.3</b>		0.20	0.20	SU			05/31/18 16:56	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-5

**Client Sample ID: 3082-4-B01-2**

**Lab Sample ID: 500-145966-12**

**Date Collected: 05/24/18 12:45**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 75.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0022		0.0022	0.00073	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
1,1,2,2-Tetrachloroethane	<0.0022		0.0022	0.00069	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
1,1,2-Trichloroethane	<0.0022		0.0022	0.00093	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
1,1-Dichloroethane	<0.0022		0.0022	0.00074	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
1,1-Dichloroethene	<0.0022		0.0022	0.00075	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
1,2-Dichloroethane	<0.0054		0.0054	0.0017	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
1,2-Dichloropropane	<0.0022		0.0022	0.00056	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
1,3-Dichloropropene, Total	<0.0022		0.0022	0.00076	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
<b>2-Butanone (MEK)</b>	<b>0.0083</b>		0.0054	0.0024	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
2-Hexanone	<0.0054		0.0054	0.0017	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0016	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
<b>Acetone</b>	<b>0.052</b>		0.022	0.0095	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Benzene	<0.0022		0.0022	0.00055	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Bromodichloromethane	<0.0022		0.0022	0.00044	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Bromoform	<0.0022		0.0022	0.00063	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Bromomethane	<0.0054		0.0054	0.0021	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Carbon disulfide	<0.0054		0.0054	0.0011	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Carbon tetrachloride	<0.0022		0.0022	0.00063	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Chlorobenzene	<0.0022		0.0022	0.00080	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Chloroethane	<0.0054		0.0054	0.0016	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Chloroform	<0.0022		0.0022	0.00075	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Chloromethane	<0.0054		0.0054	0.0022	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
cis-1,2-Dichloroethene	<0.0022		0.0022	0.00061	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
cis-1,3-Dichloropropene	<0.0022		0.0022	0.00065	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Dibromochloromethane	<0.0022		0.0022	0.00071	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Ethylbenzene	<0.0022		0.0022	0.0010	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Methyl tert-butyl ether	<0.0022		0.0022	0.00064	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Methylene Chloride	<0.0054		0.0054	0.0021	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Styrene	<0.0022		0.0022	0.00066	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Tetrachloroethene	<0.0022		0.0022	0.00074	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Toluene	<0.0022		0.0022	0.00055	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
trans-1,2-Dichloroethene	<0.0022		0.0022	0.00096	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
trans-1,3-Dichloropropene	<0.0022		0.0022	0.00076	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Trichloroethene	<0.0022		0.0022	0.00073	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Vinyl chloride	<0.0022		0.0022	0.00096	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1
Xylenes, Total	<0.0043		0.0043	0.00069	mg/Kg	☼	05/25/18 17:06	05/30/18 17:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		70 - 134	05/25/18 17:06	05/30/18 17:44	1
4-Bromofluorobenzene (Surr)	101		75 - 131	05/25/18 17:06	05/30/18 17:44	1
Dibromofluoromethane	84		75 - 126	05/25/18 17:06	05/30/18 17:44	1
Toluene-d8 (Surr)	95		75 - 124	05/25/18 17:06	05/30/18 17:44	1

## Method: 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	0.047	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
1,2-Dichlorobenzene	<0.22		0.22	0.052	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
1,3-Dichlorobenzene	<0.22		0.22	0.049	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
1,4-Dichlorobenzene	<0.22		0.22	0.055	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
2,2'-oxybis[1-chloropropane]	<0.22		0.22	0.050	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-5

**Client Sample ID: 3082-4-B01-2**

**Lab Sample ID: 500-145966-12**

**Date Collected: 05/24/18 12:45**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 75.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.43		0.43	0.098	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
2,4,6-Trichlorophenol	<0.43		0.43	0.15	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
2,4-Dichlorophenol	<0.43		0.43	0.10	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
2,4-Dimethylphenol	<0.43		0.43	0.16	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
2,4-Dinitrophenol	<0.87		0.87	0.76	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
2,4-Dinitrotoluene	<0.22		0.22	0.069	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
2,6-Dinitrotoluene	<0.22		0.22	0.085	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
2-Chloronaphthalene	<0.22		0.22	0.048	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
2-Chlorophenol	<0.22		0.22	0.074	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
2-Methylnaphthalene	<0.087		0.087	0.0079	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
2-Methylphenol	<0.22		0.22	0.069	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
2-Nitroaniline	<0.22		0.22	0.058	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
2-Nitrophenol	<0.43		0.43	0.10	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
3 & 4 Methylphenol	<0.22		0.22	0.072	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.060	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
3-Nitroaniline	<0.43		0.43	0.13	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
4,6-Dinitro-2-methylphenol	<0.87		0.87	0.35	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
4-Bromophenyl phenyl ether	<0.22		0.22	0.057	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
4-Chloro-3-methylphenol	<0.43		0.43	0.15	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
4-Chloroaniline	<0.87		0.87	0.20	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
4-Chlorophenyl phenyl ether	<0.22		0.22	0.050	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
4-Nitroaniline	<0.43		0.43	0.18	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
4-Nitrophenol	<0.87		0.87	0.41	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Acenaphthene	<0.043		0.043	0.0078	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Acenaphthylene	<0.043		0.043	0.0057	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Anthracene	<0.043		0.043	0.0072	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Benzo[a]anthracene	<0.043		0.043	0.0058	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Benzo[a]pyrene	<0.043		0.043	0.0084	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
<b>Benzo[b]fluoranthene</b>	<b>0.011</b>	<b>J</b>	0.043	0.0093	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Benzo[g,h,i]perylene	<0.043		0.043	0.014	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Benzo[k]fluoranthene	<0.043		0.043	0.013	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Bis(2-chloroethoxy)methane	<0.22		0.22	0.044	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Bis(2-chloroethyl)ether	<0.22		0.22	0.065	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Bis(2-ethylhexyl) phthalate	<0.22		0.22	0.079	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Butyl benzyl phthalate	<0.22		0.22	0.082	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Carbazole	<0.22		0.22	0.11	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Chrysene	<0.043		0.043	0.012	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Dibenz(a,h)anthracene	<0.043		0.043	0.0083	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Dibenzofuran	<0.22		0.22	0.051	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Diethyl phthalate	<0.22		0.22	0.073	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Dimethyl phthalate	<0.22		0.22	0.056	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Di-n-butyl phthalate	<0.22		0.22	0.066	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Di-n-octyl phthalate	<0.22		0.22	0.070	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Fluoranthene	<0.043		0.043	0.0080	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Fluorene	<0.043		0.043	0.0061	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Hexachlorobenzene	<0.087		0.087	0.010	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Hexachlorobutadiene	<0.22		0.22	0.068	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Hexachlorocyclopentadiene	<0.87		0.87	0.25	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Hexachloroethane	<0.22		0.22	0.066	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-5

**Client Sample ID: 3082-4-B01-2**

**Lab Sample ID: 500-145966-12**

**Date Collected: 05/24/18 12:45**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 75.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.043		0.043	0.011	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Isophorone	<0.22		0.22	0.048	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Naphthalene	<0.043		0.043	0.0066	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Nitrobenzene	<0.043		0.043	0.011	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
N-Nitrosodi-n-propylamine	<0.087		0.087	0.053	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
N-Nitrosodiphenylamine	<0.22		0.22	0.051	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Pentachlorophenol	<0.87		0.87	0.69	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Phenanthrene	<0.043		0.043	0.0060	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Phenol	<0.22		0.22	0.096	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Pyrene	<0.043		0.043	0.0086	mg/Kg	☼	06/02/18 23:39	06/06/18 12:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	81		25 - 139				06/02/18 23:39	06/06/18 12:38	1
2-Fluorobiphenyl	65		44 - 121				06/02/18 23:39	06/06/18 12:38	1
2-Fluorophenol	80		46 - 133				06/02/18 23:39	06/06/18 12:38	1
Nitrobenzene-d5	60		41 - 120				06/02/18 23:39	06/06/18 12:38	1
Phenol-d5	87		46 - 125				06/02/18 23:39	06/06/18 12:38	1
Terphenyl-d14	83		35 - 160				06/02/18 23:39	06/06/18 12:38	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Arsenic	7.4		0.62	0.21	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Barium	93		0.62	0.071	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Beryllium	0.77		0.25	0.058	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Boron	7.7		3.1	0.29	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Cadmium	0.31	B	0.12	0.022	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Calcium	3000	B	12	2.1	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Chromium	18		0.62	0.31	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Cobalt	12		0.31	0.081	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Copper	21		0.62	0.17	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Iron	18000		12	6.5	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Lead	18		0.31	0.14	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Magnesium	3200		6.2	3.1	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Manganese	440		0.62	0.090	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Nickel	26		0.62	0.18	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Potassium	2500		31	11	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Selenium	1.1		0.62	0.37	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Silver	0.29	J	0.31	0.080	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Sodium	1400		62	9.2	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Thallium	<0.62		0.62	0.31	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Vanadium	25		0.31	0.073	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1
Zinc	73		1.2	0.55	mg/Kg	☼	05/29/18 06:48	05/30/18 04:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.025		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:30	1
Iron	0.67		0.40	0.20	mg/L		05/30/18 09:01	05/30/18 18:30	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/30/18 09:01	05/30/18 18:30	1
Manganese	7.0		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:30	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-5

**Client Sample ID: 3082-4-B01-2**

**Lab Sample ID: 500-145966-12**

**Date Collected: 05/24/18 12:45**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 75.2**

### Method: 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		05/30/18 14:20	05/31/18 22:41	1
Barium	0.51		0.50	0.050	mg/L		05/30/18 14:20	05/31/18 22:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/18 14:20	05/31/18 22:41	1
Boron	0.15		0.10	0.050	mg/L		05/30/18 14:20	05/31/18 22:41	1
Cadmium	0.0027	J	0.0050	0.0020	mg/L		05/30/18 14:20	05/31/18 22:41	1
Calcium	12		2.5	0.50	mg/L		05/30/18 14:20	05/31/18 22:41	1
Chromium	0.11		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:41	1
Cobalt	0.030		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:41	1
Iron	80	B	0.40	0.20	mg/L		05/30/18 14:20	05/31/18 22:41	1
Lead	0.031		0.0075	0.0075	mg/L		05/30/18 14:20	05/31/18 22:41	1
Manganese	1.1		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:41	1
Nickel	0.089		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:41	1
Potassium	22		2.5	0.50	mg/L		05/30/18 14:20	05/31/18 22:41	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/18 14:20	05/31/18 22:41	1
Silver	<0.025		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:41	1
Zinc	0.27	J	0.50	0.020	mg/L		05/30/18 14:20	05/31/18 22:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/18 14:20	06/01/18 17:25	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/18 14:20	06/01/18 17:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/31/18 12:20	06/01/18 16:06	1

### Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035		0.021	0.0069	mg/Kg	☼	05/30/18 13:25	05/31/18 15:42	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.25	J	0.58	0.20	mg/Kg	☼	06/07/18 14:30	06/07/18 18:18	1
pH	6.9		0.20	0.20	SU			05/31/18 16:56	1



# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-5

## 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.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F3	Duplicate RPD exceeds the control limit

### General Chemistry

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

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
$\alpha$	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-5

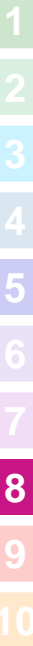
## Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids





# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	<b>Laboratory</b> Lab: Test America - Chicago Address: 2417 Bond Street University Park, IL 60484 Phone: 708-534-5200 Contact: Dick Wright email: richard.wright@testamericainc.com	Project Name: <u>1L22 &amp; 1L59, LAKE COUNTY</u> Project No.: <u>PTB184-006/AG7-04</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>Josh Hey / S Knudsen</u>	COC No.: <u>1</u> of <u>1</u> Lab Job No.: <u>500-145966</u> Sample Temp: <u>21.2, 8.5, 21</u>
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**Special Instructions:**  
See Table 2 for complete parameter lists and minimum reporting limits.  
\* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.  
\*\* If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.  
\*\*\* If total cyanide exceeds <sup>MAC</sup> Class I Standard, 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			
11	3082-4-1301-1	5-24-18	1240	S	X	X					X	X	X	X	X				
12	3082-4-1302-2	5-24-18	1245	↓	↓	↓					↓	↓	↓	↓	↓				
13	Trp Bank #1				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>5-24-18 1620</u>	Received by: <u>[Signature]</u>	Date/Time: <u>5-24-18 1620</u>
Relinquished by: <u>[Signature]</u>	Date/Time: <u>5-24-18 1835</u>	Received by: <u>[Signature]</u>	Date/Time: <u>5/25/18 0715</u>
Relinquished by:	Date/Time:	Received by:	Date/Time:



# Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • IL • 62794-9276

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

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

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

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

### I. Source Location Information

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

Project Name: FAP 337 (IL 22) & FAP 338 (IL 59) Office Phone Number, if available: \_\_\_\_\_

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

400 block of East IL 22 (south side of IL 22 between Honey Lake Road and Saddle Tree Lane)

City: North Barrington State: IL Zip Code: 60010

County: Lake Township: Cuba

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

Latitude: 42.19042 Longitude: -88.12919

(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: \_\_\_\_\_

### 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: Kristine A. Kutscher

Email, if available: Kristine.Kutscher@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: Kristine A. Kutscher

Email, if available: Kristine.Kutscher@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 additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 337 (IL 22) & FAP 338 (IL 59)

Latitude: 42.19042 Longitude: -88.12919

Uncontaminated Site 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 approximately located 35 Ill. Adm. Code 1100.610(a):

LOCATION 3382-6-B01 WAS SAMPLED ADJACENT TO SITE 3082-6 SEE TABLE 3b AND FIGURE 2 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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


TESTAMERICA ANALYTICAL REPORT - JOB ID NUMBER: 500-145966-1

**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:

October 19, 2018  
 Date:



**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



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.

ISGS Site 3082-6  
Vacant Land

Sample ID	3082-6-B01	Maximum Allowable Concentration					
Sample Depth (ft)	0-2						
Sample Date	5/24/2018						
PID	0						
Sample pH	8.9						
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	0.096	1,2	0.09	0.09	0.98	1.3	2.1

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

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

TestAmerica Job ID: 500-145966-1  
Client Project/Site: IDOT - AE7-04

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

Attn: Ms. Colleen Grey



Authorized for release by:  
6/12/2018 3:31:49 PM

Richard Wright, Senior Project Manager  
(708)534-5200  
[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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

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# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-1

**Client Sample ID: 3082-6-B01**

**Lab Sample ID: 500-145966-1**

**Date Collected: 05/24/18 12:00**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 85.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0015		0.0015	0.00049	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
1,1,2,2-Tetrachloroethane	<0.0015		0.0015	0.00047	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
1,1,2-Trichloroethane	<0.0015		0.0015	0.00062	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
1,1-Dichloroethane	<0.0015		0.0015	0.00050	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
1,1-Dichloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
1,2-Dichloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
1,2-Dichloropropane	<0.0015		0.0015	0.00038	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
1,3-Dichloropropene, Total	<0.0015		0.0015	0.00051	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
2-Butanone (MEK)	<0.0036		0.0036	0.0016	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
2-Hexanone	<0.0036		0.0036	0.0011	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
4-Methyl-2-pentanone (MIBK)	<0.0036		0.0036	0.0011	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
<b>Acetone</b>	<b>0.011</b>	<b>J</b>	0.015	0.0063	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Benzene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Bromodichloromethane	<0.0015		0.0015	0.00030	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Bromoform	<0.0015		0.0015	0.00043	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Bromomethane	<0.0036		0.0036	0.0014	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Carbon disulfide	<0.0036		0.0036	0.00076	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Carbon tetrachloride	<0.0015		0.0015	0.00042	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Chlorobenzene	<0.0015		0.0015	0.00054	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Chloroethane	<0.0036		0.0036	0.0011	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Chloroform	<0.0015		0.0015	0.00051	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Chloromethane	<0.0036		0.0036	0.0015	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
cis-1,2-Dichloroethene	<0.0015		0.0015	0.00041	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
cis-1,3-Dichloropropene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Dibromochloromethane	<0.0015		0.0015	0.00048	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Ethylbenzene	<0.0015		0.0015	0.00070	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Methyl tert-butyl ether	<0.0015		0.0015	0.00043	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Methylene Chloride	<0.0036		0.0036	0.0014	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Styrene	<0.0015		0.0015	0.00044	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Tetrachloroethene	<0.0015		0.0015	0.00050	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Toluene	<0.0015		0.0015	0.00037	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
trans-1,2-Dichloroethene	<0.0015		0.0015	0.00065	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
trans-1,3-Dichloropropene	<0.0015		0.0015	0.00051	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Trichloroethene	<0.0015		0.0015	0.00049	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Vinyl chloride	<0.0015		0.0015	0.00064	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1
Xylenes, Total	<0.0029		0.0029	0.00047	mg/Kg	☼	05/25/18 17:06	05/30/18 13:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	05/25/18 17:06	05/30/18 13:21	1
4-Bromofluorobenzene (Surr)	100		75 - 131	05/25/18 17:06	05/30/18 13:21	1
Dibromofluoromethane	83		75 - 126	05/25/18 17:06	05/30/18 13:21	1
Toluene-d8 (Surr)	94		75 - 124	05/25/18 17:06	05/30/18 13:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-1

**Client Sample ID: 3082-6-B01**

**Lab Sample ID: 500-145966-1**

**Date Collected: 05/24/18 12:00**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 85.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.38		0.38	0.086	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
2,4,6-Trichlorophenol	<0.38	F1	0.38	0.13	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
2,4-Dichlorophenol	<0.38		0.38	0.090	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
2,4-Dimethylphenol	<0.38	F1	0.38	0.14	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
2,4-Dinitrophenol	<0.76	F1	0.76	0.67	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
2-Methylnaphthalene	<0.076		0.076	0.0070	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
2-Nitrophenol	<0.38		0.38	0.089	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
3,3'-Dichlorobenzidine	<0.19	F1 F2	0.19	0.053	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
4,6-Dinitro-2-methylphenol	<0.76	F1	0.76	0.30	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
4-Chloroaniline	<0.76		0.76	0.18	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
4-Nitrophenol	<0.76	F2	0.76	0.36	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
<b>Anthracene</b>	<b>0.016</b>	<b>J</b>	0.038	0.0063	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
<b>Benzo[a]anthracene</b>	<b>0.071</b>		0.038	0.0051	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
<b>Benzo[a]pyrene</b>	<b>0.096</b>		0.038	0.0073	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
<b>Benzo[b]fluoranthene</b>	<b>0.15</b>		0.038	0.0082	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
<b>Benzo[g,h,i]perylene</b>	<b>0.039</b>	<b>F1</b>	0.038	0.012	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
<b>Benzo[k]fluoranthene</b>	<b>0.048</b>		0.038	0.011	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Butyl benzyl phthalate	<0.19	F1	0.19	0.072	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
<b>Carbazole</b>	<b>0.13</b>	<b>J</b>	0.19	0.095	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
<b>Chrysene</b>	<b>0.10</b>		0.038	0.010	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
<b>Dibenz(a,h)anthracene</b>	<b>0.0091</b>	<b>J F1</b>	0.038	0.0073	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
<b>Fluoranthene</b>	<b>0.15</b>		0.038	0.0070	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Fluorene	<0.038		0.038	0.0053	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Hexachlorobenzene	<0.076		0.076	0.0088	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Hexachlorocyclopentadiene	<0.76	F1	0.76	0.22	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Hexachloroethane	<0.19	F1	0.19	0.058	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-1

**Client Sample ID: 3082-6-B01**

**Lab Sample ID: 500-145966-1**

**Date Collected: 05/24/18 12:00**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 85.7**

**Method: 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>0.042</b>	<b>F1</b>	0.038	0.0098	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Naphthalene	<0.038		0.038	0.0058	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Nitrobenzene	<0.038		0.038	0.0094	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
N-Nitrosodi-n-propylamine	<0.076		0.076	0.046	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Pentachlorophenol	<0.76	F1	0.76	0.61	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
<b>Phenanthrene</b>	<b>0.060</b>		0.038	0.0053	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
Phenol	<0.19		0.19	0.084	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	1
<b>Pyrene</b>	<b>0.16</b>	<b>F1</b>	0.038	0.0075	mg/Kg	☼	06/02/18 23:39	06/06/18 19:22	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	41		25 - 139				06/02/18 23:39	06/06/18 19:22	1
2-Fluorobiphenyl	90		44 - 121				06/02/18 23:39	06/06/18 19:22	1
2-Fluorophenol	111		46 - 133				06/02/18 23:39	06/06/18 19:22	1
Nitrobenzene-d5	83		41 - 120				06/02/18 23:39	06/06/18 19:22	1
Phenol-d5	89		46 - 125				06/02/18 23:39	06/06/18 19:22	1
Terphenyl-d14	134		35 - 160				06/02/18 23:39	06/06/18 19:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.28</b>	<b>J F1</b>	1.1	0.21	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Arsenic</b>	<b>6.3</b>		0.55	0.19	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Barium</b>	<b>37</b>		0.55	0.063	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Beryllium</b>	<b>0.52</b>		0.22	0.052	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Boron</b>	<b>12</b>		2.8	0.26	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Cadmium</b>	<b>0.72</b>	<b>B</b>	0.11	0.020	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Calcium</b>	<b>87000</b>	<b>F2</b>	110	19	mg/Kg	☼	05/29/18 06:48	05/30/18 17:37	10
<b>Chromium</b>	<b>13</b>		0.55	0.27	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Cobalt</b>	<b>8.2</b>		0.28	0.072	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Copper</b>	<b>20</b>	<b>F1</b>	0.55	0.15	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Iron</b>	<b>15000</b>		11	5.7	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Lead</b>	<b>73</b>	<b>F2</b>	0.28	0.13	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Magnesium</b>	<b>33000</b>	<b>F2</b>	5.5	2.7	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Manganese</b>	<b>350</b>	<b>F2</b>	0.55	0.080	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Nickel</b>	<b>21</b>		0.55	0.16	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Potassium</b>	<b>1900</b>	<b>F1 F2</b>	28	9.8	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Selenium</b>	<b>0.63</b>	<b>F1</b>	0.55	0.32	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Silver</b>	<b>0.14</b>	<b>J</b>	0.28	0.071	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Sodium</b>	<b>2400</b>		55	8.2	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
Thallium	<0.55	F1	0.55	0.28	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Vanadium</b>	<b>16</b>		0.28	0.065	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1
<b>Zinc</b>	<b>99</b>	<b>F1</b>	1.1	0.49	mg/Kg	☼	05/29/18 06:48	05/30/18 03:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.40		0.40	0.20	mg/L		05/30/18 09:01	05/30/18 17:34	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/30/18 09:01	05/30/18 17:34	1
<b>Manganese</b>	<b>3.4</b>		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 17:34	1
<b>Nickel</b>	<b>0.023</b>	<b>J</b>	0.025	0.010	mg/L		05/30/18 09:01	05/30/18 17:34	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-1

**Client Sample ID: 3082-6-B01**

**Lab Sample ID: 500-145966-1**

**Date Collected: 05/24/18 12:00**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 85.7**

**Method: 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		05/30/18 14:20	05/31/18 21:49	1
Barium	0.32	J	0.50	0.050	mg/L		05/30/18 14:20	05/31/18 21:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/18 14:20	05/31/18 21:49	1
Boron	0.14		0.10	0.050	mg/L		05/30/18 14:20	05/31/18 21:49	1
Cadmium	0.0028	J	0.0050	0.0020	mg/L		05/30/18 14:20	05/31/18 21:49	1
Calcium	25		2.5	0.50	mg/L		05/30/18 14:20	05/31/18 21:49	1
Chromium	0.093		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 21:49	1
Cobalt	0.036		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 21:49	1
Iron	98	B	0.40	0.20	mg/L		05/30/18 14:20	05/31/18 21:49	1
Lead	0.16		0.0075	0.0075	mg/L		05/30/18 14:20	05/31/18 21:49	1
Manganese	0.79		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 21:49	1
Nickel	0.11		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 21:49	1
Potassium	24		2.5	0.50	mg/L		05/30/18 14:20	05/31/18 21:49	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/18 14:20	05/31/18 21:49	1
Silver	<0.025		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 21:49	1
Zinc	0.30	J	0.50	0.020	mg/L		05/30/18 14:20	05/31/18 21:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/18 14:20	06/01/18 16:36	1
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/18 14:20	06/01/18 16:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00020		0.00020	0.00020	mg/L		05/31/18 12:20	06/01/18 15:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.018	0.0058	mg/Kg	☼	05/30/18 13:25	05/31/18 15:06	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.55		0.55	0.19	mg/Kg	☼	06/07/18 14:30	06/07/18 18:14	1
pH	8.9		0.20	0.20	SU			05/31/18 16:56	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-1

## 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
F1	MS and/or MSD Recovery is outside acceptance 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.
X	Surrogate is outside control limits

### Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery 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.
B	Compound was found in the blank and sample.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit
L	A negative instrument reading had an absolute value greater than the reporting limit
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.

### 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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)



# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-1

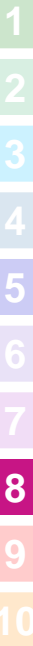
## Laboratory: TestAmerica Chicago

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


Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids



## CHAIN OF CUSTODY RECORD

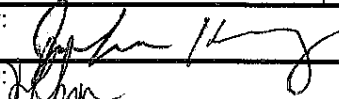
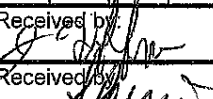
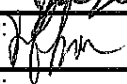
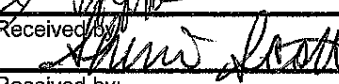
<b>Client Contact</b> Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	 500-145966 COC	<b>Laboratory</b> Lab: <b>Test America - Chicago</b> Address: <b>2417 Bond Street</b> <b>University Park, IL 60484</b> Phone: <b>708-534-5200</b> Contact: <b>Dick Wright</b> email: richard.wright@testamericainc.com	Project Name: <u>1228 1259 LAKE COUNTY</u> Project No.: <u>PT13184-006 / AE7-04</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>J. Hoey / S. Khodai</u>	COC No.: <u>1</u> of <u>1</u> Lab Job No.: <u>500-145966</u> Sample Temp: <u>21.2, 8, 5.1</u>
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**Special Instructions:**  
 See Table 2 for complete parameter lists and minimum reporting limits.  
 \* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.  
 \*\* If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.  
 \*\*\* If total cyanide exceeds <sup>MAC</sup> Class I Standard, 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	3082-6-1301	5-24-18	1200	S	X	X					X	X	X	X	X					
2	3082-6-1302-1	5-24-18	1215	↓	↓	↓					↓	↓	↓	↓	↓					
3	3082-6-1302-2	5-24-18	1220	↓	↓	↓					↓	↓	↓	↓	↓					

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

Relinquished by: 	Date/Time: <u>5-24-18 1820</u>	Received by: 	Date/Time: <u>5-24-18 1620</u>
Relinquished by: 	Date/Time: <u>5-24-18 1835</u>	Received by: 	Date/Time: <u>5/25/18 0715</u>
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: _____



# Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • IL • 62794-9276

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

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

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

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

### I. Source Location Information

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

Project Name: FAP 337 (IL 22) & FAP 338 (IL 59) Office Phone Number, if available: \_\_\_\_\_

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

130 North IL 59 and 557 Signal Hill Road

City: North Barrington State: IL Zip Code: 60010

County: Lake Township: Cuba

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

Latitude: 42.19724 Longitude: -88.13751

(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: \_\_\_\_\_

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

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

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

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

City: Schaumburg State: IL

City: Schaumburg State: IL

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

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

Contact: Kristine A. Kutscher

Contact: Kristine A. Kutscher

Email, if available: Kristine.Kutscher@illinois.gov

Email, if available: Kristine.Kutscher@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 additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 337 (IL 22) & FAP 338 (IL 59)

Latitude: 42.19724 Longitude: -88.13751

Uncontaminated Site 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 approximately located 35 Ill. Adm. Code 1100.610(a):

LOCATIONS 3382-10-B01 AND 3382-10-B02 WERE SAMPLED ADJACENT TO SITE 3082-10 SEE TABLE 3d AND FIGURE 3 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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


TESTAMERICA ANALYTICAL REPORT - JOB ID NUMBER: 500-145966-3

**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:

October 19, 2018  
 Date:



**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

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.



**ISGS Site 3082-10**

**Residences**

Sample ID	3082-10-B01	3082-10-B02	Maximum Allowable Concentration				
Sample Depth (ft)	0-7	0-7					
Sample Date	5/24/2018	5/24/2018					
PID	0	0					
Sample pH	8.9	8.2					
Matrix	Soil	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>							

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

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

TestAmerica Job ID: 500-145966-3  
Client Project/Site: IDOT - AE7-04

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

Attn: Ms. Colleen Grey



Authorized for release by:  
6/12/2018 3:36:55 PM

Richard Wright, Senior Project Manager  
(708)534-5200  
[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

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

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

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

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# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-3

**Client Sample ID: 3082-10-B01**

**Lab Sample ID: 500-145966-5**

**Date Collected: 05/24/18 10:50**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 85.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0016		0.0016	0.00055	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
1,1,2,2-Tetrachloroethane	<0.0016		0.0016	0.00053	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
1,1,2-Trichloroethane	<0.0016		0.0016	0.00071	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
1,1-Dichloroethane	<0.0016		0.0016	0.00056	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
1,1-Dichloroethene	<0.0016		0.0016	0.00057	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
1,2-Dichloroethane	<0.0041		0.0041	0.0013	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
1,2-Dichloropropane	<0.0016		0.0016	0.00042	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
1,3-Dichloropropene, Total	<0.0016		0.0016	0.00058	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
<b>2-Butanone (MEK)</b>	<b>0.0041</b>		0.0041	0.0018	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
2-Hexanone	<0.0041		0.0041	0.0013	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0012	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
<b>Acetone</b>	<b>0.024</b>		0.016	0.0072	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Benzene	<0.0016		0.0016	0.00042	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Bromodichloromethane	<0.0016		0.0016	0.00033	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Bromoform	<0.0016		0.0016	0.00048	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Bromomethane	<0.0041		0.0041	0.0016	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Carbon disulfide	<0.0041		0.0041	0.00085	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Carbon tetrachloride	<0.0016		0.0016	0.00048	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Chlorobenzene	<0.0016		0.0016	0.00061	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Chloroethane	<0.0041		0.0041	0.0012	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Chloroform	<0.0016		0.0016	0.00057	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Chloromethane	<0.0041		0.0041	0.0017	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
cis-1,2-Dichloroethene	<0.0016		0.0016	0.00046	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
cis-1,3-Dichloropropene	<0.0016		0.0016	0.00050	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Dibromochloromethane	<0.0016		0.0016	0.00054	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Ethylbenzene	<0.0016		0.0016	0.00079	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Methyl tert-butyl ether	<0.0016		0.0016	0.00048	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Methylene Chloride	<0.0041		0.0041	0.0016	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Styrene	<0.0016		0.0016	0.00050	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Tetrachloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Toluene	<0.0016		0.0016	0.00042	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
trans-1,2-Dichloroethene	<0.0016		0.0016	0.00073	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
trans-1,3-Dichloropropene	<0.0016		0.0016	0.00058	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Trichloroethene	<0.0016		0.0016	0.00056	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Vinyl chloride	<0.0016		0.0016	0.00073	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1
Xylenes, Total	<0.0033		0.0033	0.00053	mg/Kg	☼	05/25/18 17:06	05/30/18 15:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	05/25/18 17:06	05/30/18 15:06	1
4-Bromofluorobenzene (Surr)	102		75 - 131	05/25/18 17:06	05/30/18 15:06	1
Dibromofluoromethane	82		75 - 126	05/25/18 17:06	05/30/18 15:06	1
Toluene-d8 (Surr)	95		75 - 124	05/25/18 17:06	05/30/18 15:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-3

**Client Sample ID: 3082-10-B01**

**Lab Sample ID: 500-145966-5**

**Date Collected: 05/24/18 10:50**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 85.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
2-Methylnaphthalene	<0.074		0.074	0.0068	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
2-Nitroaniline	<0.18		0.18	0.050	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.052	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.30	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.049	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Anthracene	<0.037		0.037	0.0061	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
<b>Benzo[a]anthracene</b>	<b>0.032</b>	<b>J</b>	0.037	0.0050	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
<b>Benzo[a]pyrene</b>	<b>0.046</b>		0.037	0.0071	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
<b>Benzo[b]fluoranthene</b>	<b>0.075</b>		0.037	0.0079	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
<b>Benzo[g,h,i]perylene</b>	<b>0.020</b>	<b>J</b>	0.037	0.012	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
<b>Benzo[k]fluoranthene</b>	<b>0.028</b>	<b>J</b>	0.037	0.011	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.038	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
<b>Carbazole</b>	<b>0.12</b>	<b>J</b>	0.18	0.092	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
<b>Chrysene</b>	<b>0.048</b>		0.037	0.010	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
<b>Dibenz(a,h)anthracene</b>	<b>0.0097</b>	<b>J</b>	0.037	0.0071	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
<b>Fluoranthene</b>	<b>0.076</b>		0.037	0.0068	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-3

**Client Sample ID: 3082-10-B01**

**Lab Sample ID: 500-145966-5**

**Date Collected: 05/24/18 10:50**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 85.7**

**Method: 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>0.016</b>	<b>J</b>	0.037	0.0095	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
N-Nitrosodi-n-propylamine	<0.074		0.074	0.045	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
<b>Phenanthrene</b>	<b>0.026</b>	<b>J</b>	0.037	0.0051	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Phenol	<0.18		0.18	0.082	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
<b>Pyrene</b>	<b>0.074</b>		0.037	0.0073	mg/Kg	☼	06/02/18 23:39	06/06/18 18:25	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	64		25 - 139				06/02/18 23:39	06/06/18 18:25	1
2-Fluorobiphenyl	87		44 - 121				06/02/18 23:39	06/06/18 18:25	1
2-Fluorophenol	107		46 - 133				06/02/18 23:39	06/06/18 18:25	1
Nitrobenzene-d5	82		41 - 120				06/02/18 23:39	06/06/18 18:25	1
Phenol-d5	52		46 - 125				06/02/18 23:39	06/06/18 18:25	1
Terphenyl-d14	116		35 - 160				06/02/18 23:39	06/06/18 18:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Arsenic</b>	<b>4.8</b>		0.54	0.19	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Barium</b>	<b>42</b>		0.54	0.062	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Beryllium</b>	<b>0.37</b>		0.22	0.051	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Boron</b>	<b>4.7</b>		2.7	0.25	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Cadmium</b>	<b>0.36</b>	<b>B</b>	0.11	0.020	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Calcium</b>	<b>90000</b>		110	18	mg/Kg	☼	05/29/18 06:48	05/30/18 18:09	10
<b>Chromium</b>	<b>10</b>		0.54	0.27	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Cobalt</b>	<b>6.0</b>		0.27	0.071	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Copper</b>	<b>13</b>		0.54	0.15	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Iron</b>	<b>14000</b>		11	5.6	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Lead</b>	<b>20</b>		0.27	0.13	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Magnesium</b>	<b>31000</b>		5.4	2.7	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Manganese</b>	<b>260</b>		0.54	0.079	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Nickel</b>	<b>13</b>		0.54	0.16	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Potassium</b>	<b>760</b>		27	9.6	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Selenium</b>	<b>0.55</b>		0.54	0.32	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Silver</b>	<b>0.097</b>	<b>J</b>	0.27	0.070	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Sodium</b>	<b>1100</b>		54	8.0	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Vanadium</b>	<b>15</b>		0.27	0.064	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1
<b>Zinc</b>	<b>44</b>		1.1	0.48	mg/Kg	☼	05/29/18 06:48	05/30/18 04:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/30/18 09:01	05/30/18 18:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/18 09:01	05/30/18 18:06	1
Chromium	<0.025		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:06	1
Iron	<0.40		0.40	0.20	mg/L		05/30/18 09:01	05/30/18 18:06	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-3

**Client Sample ID: 3082-10-B01**

**Lab Sample ID: 500-145966-5**

Date Collected: 05/24/18 10:50

Matrix: Solid

Date Received: 05/24/18 18:35

Percent Solids: 85.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		05/30/18 09:01	05/30/18 18:06	1
<b>Manganese</b>	<b>0.19</b>		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:06	1
Nickel	<0.025		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.058</b>		0.050	0.010	mg/L		05/30/18 14:20	05/31/18 22:05	1
<b>Barium</b>	<b>0.48</b>	J	0.50	0.050	mg/L		05/30/18 14:20	05/31/18 22:05	1
<b>Beryllium</b>	<b>0.0060</b>		0.0040	0.0040	mg/L		05/30/18 14:20	05/31/18 22:05	1
<b>Boron</b>	<b>0.18</b>		0.10	0.050	mg/L		05/30/18 14:20	05/31/18 22:05	1
<b>Cadmium</b>	<b>0.0032</b>	J	0.0050	0.0020	mg/L		05/30/18 14:20	05/31/18 22:05	1
<b>Calcium</b>	<b>33</b>		2.5	0.50	mg/L		05/30/18 14:20	05/31/18 22:05	1
<b>Chromium</b>	<b>0.14</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:05	1
<b>Cobalt</b>	<b>0.059</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:05	1
<b>Iron</b>	<b>170</b>	B	0.40	0.20	mg/L		05/30/18 14:20	05/31/18 22:05	1
<b>Lead</b>	<b>0.11</b>		0.0075	0.0075	mg/L		05/30/18 14:20	05/31/18 22:05	1
<b>Manganese</b>	<b>1.1</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:05	1
<b>Nickel</b>	<b>0.16</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:05	1
<b>Potassium</b>	<b>29</b>		2.5	0.50	mg/L		05/30/18 14:20	05/31/18 22:05	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/18 14:20	05/31/18 22:05	1
Silver	<0.025		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:05	1
<b>Zinc</b>	<b>0.43</b>	J	0.50	0.020	mg/L		05/30/18 14:20	05/31/18 22:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/18 09:01	06/04/18 20:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/18 14:20	06/01/18 16:53	1
<b>Thallium</b>	<b>0.0028</b>		0.0020	0.0020	mg/L		05/30/18 14:20	06/01/18 16:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/31/18 12:20	06/01/18 15:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.013</b>	J	0.019	0.0062	mg/Kg	☼	05/30/18 13:25	05/31/18 15:16	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total</b>	<b>0.19</b>	J	0.52	0.18	mg/Kg	☼	06/07/18 14:30	06/07/18 18:15	1
<b>pH</b>	<b>8.9</b>		0.20	0.20	SU			05/31/18 16:56	1

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-3

**Client Sample ID: 3082-10-B02**

**Lab Sample ID: 500-145966-6**

**Date Collected: 05/24/18 11:00**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 76.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00062	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00059	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00079	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
1,1-Dichloroethane	<0.0018		0.0018	0.00063	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
1,1-Dichloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
1,2-Dichloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
1,2-Dichloropropane	<0.0018		0.0018	0.00048	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00065	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
2-Butanone (MEK)	<0.0046		0.0046	0.0020	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0014	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
<b>Acetone</b>	<b>0.023</b>		0.018	0.0080	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Benzene	<0.0018		0.0018	0.00047	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Bromodichloromethane	<0.0018		0.0018	0.00037	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Bromoform	<0.0018		0.0018	0.00054	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Carbon disulfide	<0.0046		0.0046	0.00096	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Carbon tetrachloride	<0.0018		0.0018	0.00053	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Chlorobenzene	<0.0018		0.0018	0.00068	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Chloroethane	<0.0046		0.0046	0.0014	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Chloroform	<0.0018		0.0018	0.00064	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Chloromethane	<0.0046		0.0046	0.0018	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00051	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00055	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Dibromochloromethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Ethylbenzene	<0.0018		0.0018	0.00088	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00054	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Methylene Chloride	<0.0046		0.0046	0.0018	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Styrene	<0.0018		0.0018	0.00056	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Tetrachloroethene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Toluene	<0.0018		0.0018	0.00046	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00081	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00065	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Trichloroethene	<0.0018		0.0018	0.00062	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Vinyl chloride	<0.0018		0.0018	0.00081	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1
Xylenes, Total	<0.0037		0.0037	0.00059	mg/Kg	☼	05/25/18 17:06	05/30/18 15:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		70 - 134	05/25/18 17:06	05/30/18 15:33	1
4-Bromofluorobenzene (Surr)	99		75 - 131	05/25/18 17:06	05/30/18 15:33	1
Dibromofluoromethane	82		75 - 126	05/25/18 17:06	05/30/18 15:33	1
Toluene-d8 (Surr)	95		75 - 124	05/25/18 17:06	05/30/18 15:33	1

## Method: 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	0.046	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
1,2-Dichlorobenzene	<0.22		0.22	0.051	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
1,3-Dichlorobenzene	<0.22		0.22	0.048	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
1,4-Dichlorobenzene	<0.22		0.22	0.055	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
2,2'-oxybis[1-chloropropane]	<0.22		0.22	0.050	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-3

**Client Sample ID: 3082-10-B02**

**Lab Sample ID: 500-145966-6**

**Date Collected: 05/24/18 11:00**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 76.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.43		0.43	0.098	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
2,4,6-Trichlorophenol	<0.43		0.43	0.15	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
2,4-Dichlorophenol	<0.43		0.43	0.10	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
2,4-Dimethylphenol	<0.43		0.43	0.16	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
2,4-Dinitrophenol	<0.86		0.86	0.75	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
2,4-Dinitrotoluene	<0.22		0.22	0.068	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
2,6-Dinitrotoluene	<0.22		0.22	0.084	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
2-Chloronaphthalene	<0.22		0.22	0.047	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
2-Chlorophenol	<0.22		0.22	0.073	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
2-Methylnaphthalene	<0.086		0.086	0.0079	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
2-Methylphenol	<0.22		0.22	0.069	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
2-Nitroaniline	<0.22		0.22	0.058	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
2-Nitrophenol	<0.43		0.43	0.10	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
3 & 4 Methylphenol	<0.22		0.22	0.071	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
3,3'-Dichlorobenzidine	<0.22		0.22	0.060	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
3-Nitroaniline	<0.43		0.43	0.13	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
4,6-Dinitro-2-methylphenol	<0.86		0.86	0.34	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
4-Bromophenyl phenyl ether	<0.22		0.22	0.056	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
4-Chloro-3-methylphenol	<0.43		0.43	0.15	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
4-Chloroaniline	<0.86		0.86	0.20	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
4-Chlorophenyl phenyl ether	<0.22		0.22	0.050	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
4-Nitroaniline	<0.43		0.43	0.18	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
4-Nitrophenol	<0.86		0.86	0.41	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Acenaphthene	<0.043		0.043	0.0077	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Acenaphthylene	<0.043		0.043	0.0056	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Anthracene	<0.043		0.043	0.0072	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
<b>Benzo[a]anthracene</b>	<b>0.013</b>	<b>J</b>	0.043	0.0058	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
<b>Benzo[a]pyrene</b>	<b>0.016</b>	<b>J</b>	0.043	0.0083	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
<b>Benzo[b]fluoranthene</b>	<b>0.018</b>	<b>J</b>	0.043	0.0092	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Benzo[g,h,i]perylene	<0.043		0.043	0.014	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Benzo[k]fluoranthene	<0.043		0.043	0.013	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Bis(2-chloroethoxy)methane	<0.22		0.22	0.044	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Bis(2-chloroethyl)ether	<0.22		0.22	0.064	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Bis(2-ethylhexyl) phthalate	<0.22		0.22	0.078	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Butyl benzyl phthalate	<0.22		0.22	0.082	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
<b>Carbazole</b>	<b>0.13</b>	<b>J</b>	0.22	0.11	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
<b>Chrysene</b>	<b>0.013</b>	<b>J</b>	0.043	0.012	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Dibenz(a,h)anthracene	<0.043		0.043	0.0083	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Dibenzofuran	<0.22		0.22	0.050	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Diethyl phthalate	<0.22		0.22	0.073	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Dimethyl phthalate	<0.22		0.22	0.056	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Di-n-butyl phthalate	<0.22		0.22	0.065	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Di-n-octyl phthalate	<0.22		0.22	0.070	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
<b>Fluoranthene</b>	<b>0.018</b>	<b>J</b>	0.043	0.0079	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Fluorene	<0.043		0.043	0.0060	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Hexachlorobenzene	<0.086		0.086	0.0099	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Hexachlorobutadiene	<0.22		0.22	0.067	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Hexachlorocyclopentadiene	<0.86		0.86	0.25	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Hexachloroethane	<0.22		0.22	0.065	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1

TestAmerica Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-3

**Client Sample ID: 3082-10-B02**

**Lab Sample ID: 500-145966-6**

**Date Collected: 05/24/18 11:00**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 76.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.043		0.043	0.011	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Isophorone	<0.22		0.22	0.048	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Naphthalene	<0.043		0.043	0.0066	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Nitrobenzene	<0.043		0.043	0.011	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
N-Nitrosodi-n-propylamine	<0.086		0.086	0.052	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
N-Nitrosodiphenylamine	<0.22		0.22	0.051	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Pentachlorophenol	<0.86		0.86	0.69	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Phenanthrene	<0.043		0.043	0.0060	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
Phenol	<0.22		0.22	0.095	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1
<b>Pyrene</b>	<b>0.018</b>	<b>J</b>	0.043	0.0085	mg/Kg	☼	06/02/18 23:39	06/06/18 12:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	64		25 - 139	06/02/18 23:39	06/06/18 12:47	1
2-Fluorobiphenyl	65		44 - 121	06/02/18 23:39	06/06/18 12:47	1
2-Fluorophenol	80		46 - 133	06/02/18 23:39	06/06/18 12:47	1
Nitrobenzene-d5	59		41 - 120	06/02/18 23:39	06/06/18 12:47	1
Phenol-d5	79		46 - 125	06/02/18 23:39	06/06/18 12:47	1
Terphenyl-d14	90		35 - 160	06/02/18 23:39	06/06/18 12:47	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.3		1.3	0.25	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Arsenic</b>	<b>5.4</b>		0.65	0.22	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Barium</b>	<b>63</b>		0.65	0.074	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Beryllium</b>	<b>0.58</b>		0.26	0.061	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Boron</b>	<b>6.2</b>		3.3	0.30	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Cadmium</b>	<b>0.44</b>	<b>B</b>	0.13	0.024	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Calcium</b>	<b>33000</b>	<b>B</b>	13	2.2	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Chromium</b>	<b>14</b>		0.65	0.32	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Cobalt</b>	<b>7.7</b>		0.33	0.086	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Copper</b>	<b>17</b>		0.65	0.18	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Iron</b>	<b>14000</b>		13	6.8	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Lead</b>	<b>33</b>		0.33	0.15	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Magnesium</b>	<b>21000</b>		6.5	3.2	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Manganese</b>	<b>450</b>		0.65	0.095	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Nickel</b>	<b>18</b>		0.65	0.19	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Potassium</b>	<b>1300</b>		33	12	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
Selenium	<0.65		0.65	0.38	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Silver</b>	<b>0.18</b>	<b>J</b>	0.33	0.084	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Sodium</b>	<b>1700</b>		65	9.7	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
Thallium	<0.65	L	0.65	0.33	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Vanadium</b>	<b>20</b>		0.33	0.077	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1
<b>Zinc</b>	<b>58</b>		1.3	0.57	mg/Kg	☼	05/29/18 06:48	05/30/18 04:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.011</b>	<b>J</b>	0.050	0.010	mg/L		05/30/18 09:01	05/30/18 18:10	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/18 09:01	05/30/18 18:10	1
Chromium	<0.025		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:10	1
Iron	<0.40		0.40	0.20	mg/L		05/30/18 09:01	05/30/18 18:10	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-3

**Client Sample ID: 3082-10-B02**

**Lab Sample ID: 500-145966-6**

Date Collected: 05/24/18 11:00

Matrix: Solid

Date Received: 05/24/18 18:35

Percent Solids: 76.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		05/30/18 09:01	05/30/18 18:10	1
<b>Manganese</b>	<b>4.1</b>		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:10	1
Nickel	<0.025		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.053</b>		0.050	0.010	mg/L		05/30/18 14:20	05/31/18 22:21	1
<b>Barium</b>	<b>0.52</b>		0.50	0.050	mg/L		05/30/18 14:20	05/31/18 22:21	1
<b>Beryllium</b>	<b>0.0063</b>		0.0040	0.0040	mg/L		05/30/18 14:20	05/31/18 22:21	1
<b>Boron</b>	<b>0.15</b>		0.10	0.050	mg/L		05/30/18 14:20	05/31/18 22:21	1
<b>Cadmium</b>	<b>0.0027</b>	<b>J</b>	0.0050	0.0020	mg/L		05/30/18 14:20	05/31/18 22:21	1
<b>Calcium</b>	<b>23</b>		2.5	0.50	mg/L		05/30/18 14:20	05/31/18 22:21	1
<b>Chromium</b>	<b>0.15</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:21	1
<b>Cobalt</b>	<b>0.055</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:21	1
<b>Iron</b>	<b>160</b>	<b>B</b>	0.40	0.20	mg/L		05/30/18 14:20	05/31/18 22:21	1
<b>Lead</b>	<b>0.11</b>		0.0075	0.0075	mg/L		05/30/18 14:20	05/31/18 22:21	1
<b>Manganese</b>	<b>0.88</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:21	1
<b>Nickel</b>	<b>0.13</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:21	1
<b>Potassium</b>	<b>23</b>		2.5	0.50	mg/L		05/30/18 14:20	05/31/18 22:21	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/18 14:20	05/31/18 22:21	1
Silver	<0.025		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:21	1
<b>Zinc</b>	<b>0.48</b>	<b>J</b>	0.50	0.020	mg/L		05/30/18 14:20	05/31/18 22:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/18 09:01	06/04/18 20:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/18 14:20	06/01/18 16:57	1
<b>Thallium</b>	<b>0.0022</b>		0.0020	0.0020	mg/L		05/30/18 14:20	06/01/18 16:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/31/18 12:20	06/01/18 15:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.032</b>		0.021	0.0070	mg/Kg	☼	05/30/18 13:25	05/31/18 15:18	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total</b>	<b>0.26</b>	<b>J</b>	0.62	0.21	mg/Kg	☼	06/07/18 14:30	06/07/18 18:16	1
<b>pH</b>	<b>8.2</b>		0.20	0.20	SU			05/31/18 16:56	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-3

## 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.
*	RPD of the LCS and LCSD exceeds the control limits

### 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.
L	A negative instrument reading had an absolute value greater than the reporting limit

### 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.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

## 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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-3

## Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B		Water	1,3-Dichloropropene, Total
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids





# Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • IL • 62794-9276

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

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

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

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

### I. Source Location Information

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

Project Name: FAP 337 (IL 22) & FAP 338 (IL 59) Office Phone Number, if available: \_\_\_\_\_

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

160 Biltmore Drive

City: North Barrington State: IL Zip Code: 60010

County: Lake Township: Cuba

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

Latitude: 42.19784 Longitude: -88.13779

(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: \_\_\_\_\_

### 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: Kristine A. Kutscher

Email, if available: Kristine.Kutscher@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: Kristine A. Kutscher

Email, if available: Kristine.Kutscher@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 additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 337 (IL 22) & FAP 338 (IL 59)

Latitude: 42.19784 Longitude: -88.13779

Uncontaminated Site 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 approximately located 35 Ill. Adm. Code 1100.610(a):

LOCATION 3382-11-B01 WAS SAMPLED ADJACENT TO SITE 3082-11 SEE TABLE 3e 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]:


TESTAMERICA ANALYTICAL REPORT - JOB ID NUMBER: 500-145966-4

**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:

October 19, 2018  
 Date:



**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

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.

ISGS Site 3082-11  
Biltmore Country Club

Sample ID	3082-11-B01	3082-11-B01 DUP	Maximum Allowable Concentration					
Sample Depth (ft)	0-7	0-7						
Sample Date	5/24/2018	5/24/2018						
PID	0	0	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area	
Sample pH	8	7.8						
Matrix	Soil	Soil						
<b>No Contaminants of Concern Noted.</b>								

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

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

TestAmerica Job ID: 500-145966-4  
Client Project/Site: IDOT - AE7-04

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

Attn: Ms. Colleen Grey



Authorized for release by:  
6/12/2018 3:38:13 PM

Richard Wright, Senior Project Manager  
(708)534-5200  
[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

Review your project  
results through  
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Have a Question?



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

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

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

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# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-4

**Client Sample ID: 3082-11-B01**

**Lab Sample ID: 500-145966-9**

**Date Collected: 05/24/18 10:10**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 80.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0017		0.0017	0.00058	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
1,1,2,2-Tetrachloroethane	<0.0017		0.0017	0.00055	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
1,1,2-Trichloroethane	<0.0017		0.0017	0.00074	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
1,1-Dichloroethane	<0.0017		0.0017	0.00059	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
1,1-Dichloroethene	<0.0017		0.0017	0.00060	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
1,2-Dichloroethane	<0.0043		0.0043	0.0014	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
1,2-Dichloropropane	<0.0017		0.0017	0.00045	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
1,3-Dichloropropene, Total	<0.0017		0.0017	0.00061	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
2-Butanone (MEK)	<0.0043		0.0043	0.0019	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
2-Hexanone	<0.0043		0.0043	0.0014	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
4-Methyl-2-pentanone (MIBK)	<0.0043		0.0043	0.0013	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
<b>Acetone</b>	<b>0.021</b>		0.017	0.0076	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Benzene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Bromodichloromethane	<0.0017		0.0017	0.00035	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Bromoform	<0.0017		0.0017	0.00051	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Bromomethane	<0.0043		0.0043	0.0016	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Carbon disulfide	<0.0043		0.0043	0.00090	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Carbon tetrachloride	<0.0017		0.0017	0.00050	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Chlorobenzene	<0.0017		0.0017	0.00064	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Chloroethane	<0.0043		0.0043	0.0013	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Chloroform	<0.0017		0.0017	0.00060	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Chloromethane	<0.0043		0.0043	0.0017	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
cis-1,2-Dichloroethene	<0.0017		0.0017	0.00048	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
cis-1,3-Dichloropropene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Dibromochloromethane	<0.0017		0.0017	0.00057	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Ethylbenzene	<0.0017		0.0017	0.00083	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Methyl tert-butyl ether	<0.0017		0.0017	0.00051	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Methylene Chloride	<0.0043		0.0043	0.0017	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Styrene	<0.0017		0.0017	0.00052	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Tetrachloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Toluene	<0.0017		0.0017	0.00044	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
trans-1,2-Dichloroethene	<0.0017		0.0017	0.00077	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
trans-1,3-Dichloropropene	<0.0017		0.0017	0.00061	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Trichloroethene	<0.0017		0.0017	0.00059	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Vinyl chloride	<0.0017		0.0017	0.00077	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1
Xylenes, Total	<0.0035		0.0035	0.00056	mg/Kg	☼	05/25/18 17:06	05/30/18 16:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	81		70 - 134	05/25/18 17:06	05/30/18 16:25	1
4-Bromofluorobenzene (Surr)	101		75 - 131	05/25/18 17:06	05/30/18 16:25	1
Dibromofluoromethane	83		75 - 126	05/25/18 17:06	05/30/18 16:25	1
Toluene-d8 (Surr)	95		75 - 124	05/25/18 17:06	05/30/18 16:25	1

## Method: 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	☼	06/02/18 23:39	06/06/18 11:52	1
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
1,4-Dichlorobenzene	<0.21		0.21	0.052	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.047	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-4

**Client Sample ID: 3082-11-B01**

**Lab Sample ID: 500-145966-9**

**Date Collected: 05/24/18 10:10**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 80.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.41		0.41	0.093	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
2,4-Dichlorophenol	<0.41		0.41	0.097	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
2,4-Dimethylphenol	<0.41		0.41	0.15	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
2,4-Dinitrotoluene	<0.21		0.21	0.065	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
2,6-Dinitrotoluene	<0.21		0.21	0.080	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
2-Chloronaphthalene	<0.21		0.21	0.045	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
2-Methylnaphthalene	<0.082		0.082	0.0075	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
2-Nitroaniline	<0.21		0.21	0.055	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
2-Nitrophenol	<0.41		0.41	0.097	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
3 & 4 Methylphenol	<0.21		0.21	0.068	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.057	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
4-Chloroaniline	<0.82		0.82	0.19	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Acenaphthene	<0.041		0.041	0.0073	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Anthracene	<0.041		0.041	0.0068	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Benzo[a]anthracene	<0.041		0.041	0.0055	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Benzo[a]pyrene	<0.041		0.041	0.0079	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Benzo[b]fluoranthene	<0.041		0.041	0.0088	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.061	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Butyl benzyl phthalate	<0.21		0.21	0.078	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0079	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Diethyl phthalate	<0.21		0.21	0.069	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Dimethyl phthalate	<0.21		0.21	0.053	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Di-n-butyl phthalate	<0.21		0.21	0.062	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Fluoranthene	<0.041		0.041	0.0076	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Fluorene	<0.041		0.041	0.0057	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Hexachlorobenzene	<0.082		0.082	0.0095	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Hexachlorobutadiene	<0.21		0.21	0.064	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Hexachloroethane	<0.21		0.21	0.062	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-4

**Client Sample ID: 3082-11-B01**

**Lab Sample ID: 500-145966-9**

**Date Collected: 05/24/18 10:10**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 80.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
N-Nitrosodi-n-propylamine	<0.082		0.082	0.050	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
N-Nitrosodiphenylamine	<0.21		0.21	0.048	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Pentachlorophenol	<0.82		0.82	0.66	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Phenanthrene	<0.041		0.041	0.0057	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Phenol	<0.21		0.21	0.091	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Pyrene	<0.041		0.041	0.0081	mg/Kg	☼	06/02/18 23:39	06/06/18 11:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	48		25 - 139				06/02/18 23:39	06/06/18 11:52	1
2-Fluorobiphenyl	74		44 - 121				06/02/18 23:39	06/06/18 11:52	1
2-Fluorophenol	93		46 - 133				06/02/18 23:39	06/06/18 11:52	1
Nitrobenzene-d5	67		41 - 120				06/02/18 23:39	06/06/18 11:52	1
Phenol-d5	77		46 - 125				06/02/18 23:39	06/06/18 11:52	1
Terphenyl-d14	93		35 - 160				06/02/18 23:39	06/06/18 11:52	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.21	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Arsenic	9.2		0.55	0.19	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Barium	62		0.55	0.063	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Beryllium	0.66		0.22	0.051	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Boron	6.0		2.7	0.26	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Cadmium	0.46	B	0.11	0.020	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Calcium	9100	B	11	1.9	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Chromium	16		0.55	0.27	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Cobalt	16		0.27	0.072	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Copper	22		0.55	0.15	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Iron	19000		11	5.7	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Lead	85		0.27	0.13	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Magnesium	7000		5.5	2.7	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Manganese	630		0.55	0.080	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Nickel	27		0.55	0.16	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Potassium	1600		27	9.7	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Selenium	0.76		0.55	0.32	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Silver	0.22	J	0.27	0.071	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Sodium	1100		55	8.1	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Vanadium	22		0.27	0.065	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1
Zinc	73		1.1	0.48	mg/Kg	☼	05/29/18 06:48	05/30/18 04:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/30/18 09:01	05/30/18 18:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/18 09:01	05/30/18 18:18	1
Chromium	<0.025		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:18	1
Iron	<0.40		0.40	0.20	mg/L		05/30/18 09:01	05/30/18 18:18	1

TestAmerica Chicago



# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-4

**Client Sample ID: 3082-11-B01**

**Lab Sample ID: 500-145966-9**

Date Collected: 05/24/18 10:10

Matrix: Solid

Date Received: 05/24/18 18:35

Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		05/30/18 09:01	05/30/18 18:18	1
Manganese	2.5		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:18	1
Nickel	0.017	J	0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.098		0.050	0.010	mg/L		05/30/18 14:20	05/31/18 22:29	1
Barium	0.75		0.50	0.050	mg/L		05/30/18 14:20	05/31/18 22:29	1
Beryllium	0.011		0.0040	0.0040	mg/L		05/30/18 14:20	05/31/18 22:29	1
Boron	0.28		0.10	0.050	mg/L		05/30/18 14:20	05/31/18 22:29	1
Cadmium	0.0040	J	0.0050	0.0020	mg/L		05/30/18 14:20	05/31/18 22:29	1
Calcium	24		2.5	0.50	mg/L		05/30/18 14:20	05/31/18 22:29	1
Chromium	0.27		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:29	1
Cobalt	0.090		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:29	1
Iron	290	B	0.40	0.20	mg/L		05/30/18 14:20	05/31/18 22:29	1
Lead	0.14		0.0075	0.0075	mg/L		05/30/18 14:20	05/31/18 22:29	1
Manganese	2.0		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:29	1
Nickel	0.32		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:29	1
Potassium	53		2.5	0.50	mg/L		05/30/18 14:20	05/31/18 22:29	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/18 14:20	05/31/18 22:29	1
Silver	<0.025		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:29	1
Zinc	0.72		0.50	0.020	mg/L		05/30/18 14:20	05/31/18 22:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/18 09:01	06/04/18 20:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/18 14:20	06/01/18 17:05	1
Thallium	0.0068		0.0020	0.0020	mg/L		05/30/18 14:20	05/31/18 16:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00032		0.00020	0.00020	mg/L		05/31/18 12:20	06/01/18 15:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032		0.019	0.0063	mg/Kg	☼	05/30/18 13:25	05/31/18 15:23	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.23	J	0.60	0.21	mg/Kg	☼	06/07/18 14:30	06/07/18 18:16	1
pH	8.0		0.20	0.20	SU			05/31/18 16:56	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-4

**Client Sample ID: 3082-11-B01 Dup**

**Lab Sample ID: 500-145966-10**

**Date Collected: 05/24/18 10:15**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 81.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.0018		0.0018	0.00060	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
1,1,2,2-Tetrachloroethane	<0.0018		0.0018	0.00057	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
1,1,2-Trichloroethane	<0.0018		0.0018	0.00076	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
1,1-Dichloroethane	<0.0018		0.0018	0.00061	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
1,1-Dichloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
1,2-Dichloroethane	<0.0045		0.0045	0.0014	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
1,2-Dichloropropane	<0.0018		0.0018	0.00046	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
1,3-Dichloropropene, Total	<0.0018		0.0018	0.00063	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
<b>2-Butanone (MEK)</b>	<b>0.0027</b>	<b>J</b>	0.0045	0.0020	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0013	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
<b>Acetone</b>	<b>0.025</b>		0.018	0.0078	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Benzene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Bromodichloromethane	<0.0018		0.0018	0.00036	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Bromoform	<0.0018		0.0018	0.00052	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Carbon disulfide	<0.0045		0.0045	0.00093	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Carbon tetrachloride	<0.0018		0.0018	0.00052	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Chlorobenzene	<0.0018		0.0018	0.00066	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Chloroethane	<0.0045		0.0045	0.0013	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Chloroform	<0.0018		0.0018	0.00062	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Chloromethane	<0.0045		0.0045	0.0018	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
cis-1,2-Dichloroethene	<0.0018		0.0018	0.00050	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
cis-1,3-Dichloropropene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Dibromochloromethane	<0.0018		0.0018	0.00058	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Ethylbenzene	<0.0018		0.0018	0.00085	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Methyl tert-butyl ether	<0.0018		0.0018	0.00052	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Methylene Chloride	<0.0045		0.0045	0.0018	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Styrene	<0.0018		0.0018	0.00054	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Tetrachloroethene	<0.0018		0.0018	0.00061	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Toluene	<0.0018		0.0018	0.00045	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
trans-1,2-Dichloroethene	<0.0018		0.0018	0.00079	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
trans-1,3-Dichloropropene	<0.0018		0.0018	0.00063	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Trichloroethene	<0.0018		0.0018	0.00060	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Vinyl chloride	<0.0018		0.0018	0.00079	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1
Xylenes, Total	<0.0036		0.0036	0.00057	mg/Kg	☼	05/25/18 17:06	05/30/18 16:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		70 - 134	05/25/18 17:06	05/30/18 16:51	1
4-Bromofluorobenzene (Surr)	101		75 - 131	05/25/18 17:06	05/30/18 16:51	1
Dibromofluoromethane	85		75 - 126	05/25/18 17:06	05/30/18 16:51	1
Toluene-d8 (Surr)	95		75 - 124	05/25/18 17:06	05/30/18 16:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-4

**Client Sample ID: 3082-11-B01 Dup**

**Lab Sample ID: 500-145966-10**

**Date Collected: 05/24/18 10:15**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 81.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
2-Methylnaphthalene	<0.079		0.079	0.0072	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
3 & 4 Methylphenol	<0.20		0.20	0.066	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.32	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
<b>Benzo[b]fluoranthene</b>	<b>0.0089</b>	<b>J</b>	0.039	0.0085	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-4

**Client Sample ID: 3082-11-B01 Dup**

**Lab Sample ID: 500-145966-10**

**Date Collected: 05/24/18 10:15**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 81.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
N-Nitrosodi-n-propylamine	<0.079		0.079	0.048	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1
<b>Pyrene</b>	<b>0.0082</b>	<b>J</b>	0.039	0.0078	mg/Kg	☼	06/02/18 23:39	06/06/18 15:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	50		25 - 139	06/02/18 23:39	06/06/18 15:08	1
2-Fluorobiphenyl	61		44 - 121	06/02/18 23:39	06/06/18 15:08	1
2-Fluorophenol	78		46 - 133	06/02/18 23:39	06/06/18 15:08	1
Nitrobenzene-d5	57		41 - 120	06/02/18 23:39	06/06/18 15:08	1
Phenol-d5	74		46 - 125	06/02/18 23:39	06/06/18 15:08	1
Terphenyl-d14	87		35 - 160	06/02/18 23:39	06/06/18 15:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.24	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Arsenic</b>	<b>7.2</b>		0.61	0.21	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Barium</b>	<b>57</b>		0.61	0.069	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Beryllium</b>	<b>0.60</b>		0.24	0.057	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Boron</b>	<b>4.9</b>		3.0	0.28	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Cadmium</b>	<b>0.32</b>	<b>B</b>	0.12	0.022	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Calcium</b>	<b>30000</b>	<b>B</b>	12	2.1	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Chromium</b>	<b>14</b>		0.61	0.30	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Cobalt</b>	<b>13</b>		0.30	0.079	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Copper</b>	<b>17</b>		0.61	0.17	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Iron</b>	<b>17000</b>		12	6.3	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Lead</b>	<b>53</b>		0.30	0.14	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Magnesium</b>	<b>20000</b>		6.1	3.0	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Manganese</b>	<b>630</b>		0.61	0.088	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Nickel</b>	<b>22</b>		0.61	0.18	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Potassium</b>	<b>1500</b>		30	11	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Selenium</b>	<b>0.48</b>	<b>J</b>	0.61	0.36	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Silver</b>	<b>0.20</b>	<b>J</b>	0.30	0.078	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Sodium</b>	<b>1100</b>		61	9.0	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
Thallium	<0.61		0.61	0.30	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Vanadium</b>	<b>20</b>		0.30	0.072	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1
<b>Zinc</b>	<b>61</b>		1.2	0.53	mg/Kg	☼	05/29/18 06:48	05/30/18 04:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		05/30/18 09:01	05/30/18 18:22	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/18 09:01	05/30/18 18:22	1
Chromium	<0.025		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:22	1
Iron	<0.40		0.40	0.20	mg/L		05/30/18 09:01	05/30/18 18:22	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-4

**Client Sample ID: 3082-11-B01 Dup**

**Lab Sample ID: 500-145966-10**

Date Collected: 05/24/18 10:15

Matrix: Solid

Date Received: 05/24/18 18:35

Percent Solids: 81.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		05/30/18 09:01	05/30/18 18:22	1
<b>Manganese</b>	<b>1.7</b>		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:22	1
Nickel	<0.025		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>0.071</b>		0.050	0.010	mg/L		05/30/18 14:20	05/31/18 22:33	1
<b>Barium</b>	<b>0.65</b>		0.50	0.050	mg/L		05/30/18 14:20	05/31/18 22:33	1
<b>Beryllium</b>	<b>0.0082</b>		0.0040	0.0040	mg/L		05/30/18 14:20	05/31/18 22:33	1
<b>Boron</b>	<b>0.18</b>		0.10	0.050	mg/L		05/30/18 14:20	05/31/18 22:33	1
<b>Cadmium</b>	<b>0.0029</b>	<b>J</b>	0.0050	0.0020	mg/L		05/30/18 14:20	05/31/18 22:33	1
<b>Calcium</b>	<b>21</b>		2.5	0.50	mg/L		05/30/18 14:20	05/31/18 22:33	1
<b>Chromium</b>	<b>0.21</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:33	1
<b>Cobalt</b>	<b>0.064</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:33	1
<b>Iron</b>	<b>210</b>	<b>B</b>	0.40	0.20	mg/L		05/30/18 14:20	05/31/18 22:33	1
<b>Lead</b>	<b>0.14</b>		0.0075	0.0075	mg/L		05/30/18 14:20	05/31/18 22:33	1
<b>Manganese</b>	<b>1.3</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:33	1
<b>Nickel</b>	<b>0.20</b>		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:33	1
<b>Potassium</b>	<b>35</b>		2.5	0.50	mg/L		05/30/18 14:20	05/31/18 22:33	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/18 14:20	05/31/18 22:33	1
Silver	<0.025		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:33	1
<b>Zinc</b>	<b>0.61</b>		0.50	0.020	mg/L		05/30/18 14:20	05/31/18 22:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/18 09:01	06/04/18 21:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		05/30/18 14:20	06/01/18 17:17	1
<b>Thallium</b>	<b>0.0032</b>		0.0020	0.0020	mg/L		05/30/18 14:20	06/01/18 17:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.00028</b>		0.00020	0.00020	mg/L		05/31/18 12:20	06/01/18 16:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.029</b>		0.019	0.0064	mg/Kg	☼	05/30/18 13:25	05/31/18 15:25	1

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total</b>	<b>0.23</b>	<b>J</b>	0.57	0.19	mg/Kg	☼	06/07/18 14:30	06/07/18 18:17	1
<b>pH</b>	<b>7.8</b>		0.20	0.20	SU			05/31/18 16:56	1

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-4

## 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.
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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-4

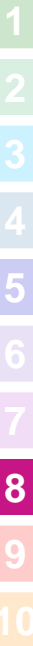
## Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids









# Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • IL • 62794-9276

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

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

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

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

### I. Source Location Information

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

Project Name: FAP 337 (IL 22) & FAP 338 (IL 59) Office Phone Number, if available: \_\_\_\_\_

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

555 Signal Hill Road

City: North Barrington State: IL Zip Code: 60010

County: Lake Township: Cuba

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

Latitude: 42.19739 Longitude: -88.13738

(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: \_\_\_\_\_

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

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

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

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

City: Schaumburg State: IL

City: Schaumburg State: IL

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

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

Contact: Kristine A. Kutscher

Contact: Kristine A. Kutscher

Email, if available: Kristine.Kutscher@illinois.gov

Email, if available: Kristine.Kutscher@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 additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAP 337 (IL 22) & FAP 338 (IL 59)

Latitude: 42.19739 Longitude: -88.13738

Uncontaminated Site 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 approximately located 35 Ill. Adm. Code 1100.610(a):

LOCATION 3382-12-B01 WAS SAMPLED ADJACENT TO SITE 3082-12 SEE TABLE 3f 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]:


TESTAMERICA ANALYTICAL REPORT - JOB ID NUMBER: 500-145966-6

**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:

October 19, 2018  
 Date:



**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

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.

**ISGS Site 3082-12**

**Residence**

<b>Sample ID</b>	3082-12-B01	<b>Maximum Allowable Concentration</b>				
<b>Sample Depth (ft)</b>	0-7					
<b>Sample Date</b>	5/24/2018	<sup>1</sup> Most Stringent	<sup>2</sup> Outside a Populated Area	<sup>3</sup> Within a Populated non-Metropolitan Statistical Area	<sup>4</sup> Within Chicago Corporate Limits	<sup>5</sup> Within a Metropolitan Statistical Area
<b>PID</b>	0					
<b>Sample pH</b>	8.3					
<b>Matrix</b>	Soil					
<b>No Contaminants of Concern Noted.</b>						

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

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

TestAmerica Job ID: 500-145966-6  
Client Project/Site: IDOT - AE7-04

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

Attn: Ms. Colleen Grey



Authorized for release by:  
6/12/2018 3:42:14 PM

Richard Wright, Senior Project Manager  
(708)534-5200  
[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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

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# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-6

**Client Sample ID: 3082-12-B01**

**Lab Sample ID: 500-145966-14**

**Date Collected: 05/24/18 10:30**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 78.5**

## Method: 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	0.00070	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
1,1,2,2-Tetrachloroethane	<0.0021		0.0021	0.00067	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
1,1,2-Trichloroethane	<0.0021		0.0021	0.00089	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
1,1-Dichloroethane	<0.0021		0.0021	0.00071	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
1,1-Dichloroethene	<0.0021		0.0021	0.00072	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
1,2-Dichloroethane	<0.0052		0.0052	0.0016	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
1,2-Dichloropropane	<0.0021		0.0021	0.00054	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
1,3-Dichloropropene, Total	<0.0021		0.0021	0.00073	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
2-Butanone (MEK)	<0.0052		0.0052	0.0023	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0015	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
<b>Acetone</b>	<b>0.029</b>		0.021	0.0091	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Benzene	<0.0021		0.0021	0.00053	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Bromodichloromethane	<0.0021		0.0021	0.00042	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Bromoform	<0.0021		0.0021	0.00061	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Bromomethane	<0.0052		0.0052	0.0020	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Carbon disulfide	<0.0052		0.0052	0.0011	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Carbon tetrachloride	<0.0021		0.0021	0.00060	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Chlorobenzene	<0.0021		0.0021	0.00077	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Chloroethane	<0.0052		0.0052	0.0015	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Chloroform	<0.0021		0.0021	0.00072	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Chloromethane	<0.0052		0.0052	0.0021	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
cis-1,2-Dichloroethene	<0.0021		0.0021	0.00058	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
cis-1,3-Dichloropropene	<0.0021		0.0021	0.00063	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Dibromochloromethane	<0.0021		0.0021	0.00068	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Ethylbenzene	<0.0021		0.0021	0.0010	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Methyl tert-butyl ether	<0.0021		0.0021	0.00061	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Methylene Chloride	<0.0052		0.0052	0.0021	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Styrene	<0.0021		0.0021	0.00063	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Tetrachloroethene	<0.0021		0.0021	0.00071	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Toluene	<0.0021		0.0021	0.00053	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
trans-1,2-Dichloroethene	<0.0021		0.0021	0.00092	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
trans-1,3-Dichloropropene	<0.0021		0.0021	0.00073	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Trichloroethene	<0.0021		0.0021	0.00070	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Vinyl chloride	<0.0021		0.0021	0.00092	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1
Xylenes, Total	<0.0042		0.0042	0.00067	mg/Kg	☼	05/25/18 17:06	05/30/18 18:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		70 - 134	05/25/18 17:06	05/30/18 18:36	1
4-Bromofluorobenzene (Surr)	102		75 - 131	05/25/18 17:06	05/30/18 18:36	1
Dibromofluoromethane	83		75 - 126	05/25/18 17:06	05/30/18 18:36	1
Toluene-d8 (Surr)	94		75 - 124	05/25/18 17:06	05/30/18 18:36	1

## Method: 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	☼	06/02/18 23:39	06/06/18 13:04	1
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-6

**Client Sample ID: 3082-12-B01**

**Lab Sample ID: 500-145966-14**

**Date Collected: 05/24/18 10:30**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 78.5**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
2,4-Dinitrophenol	<0.85		0.85	0.74	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
2-Methylnaphthalene	<0.085		0.085	0.0077	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
4,6-Dinitro-2-methylphenol	<0.85		0.85	0.34	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
4-Chloroaniline	<0.85		0.85	0.20	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Acenaphthene	<0.042		0.042	0.0075	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Benzo[a]anthracene	<0.042		0.042	0.0056	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Benzo[a]pyrene	<0.042		0.042	0.0081	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Benzo[b]fluoranthene	<0.042		0.042	0.0090	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Benzo[g,h,i]perylene	<0.042		0.042	0.013	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Carbazole	<0.21		0.21	0.10	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Chrysene	<0.042		0.042	0.011	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Fluoranthene	<0.042		0.042	0.0078	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Hexachlorobenzene	<0.085		0.085	0.0097	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-6

**Client Sample ID: 3082-12-B01**

**Lab Sample ID: 500-145966-14**

**Date Collected: 05/24/18 10:30**

**Matrix: Solid**

**Date Received: 05/24/18 18:35**

**Percent Solids: 78.5**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Naphthalene	<0.042		0.042	0.0064	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
N-Nitrosodi-n-propylamine	<0.085		0.085	0.051	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Pentachlorophenol	<0.85		0.85	0.67	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Phenanthrene	<0.042		0.042	0.0058	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
Phenol	<0.21		0.21	0.093	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1
<b>Pyrene</b>	<b>0.010</b>	<b>J</b>	0.042	0.0083	mg/Kg	☼	06/02/18 23:39	06/06/18 13:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	84		25 - 139	06/02/18 23:39	06/06/18 13:04	1
2-Fluorobiphenyl	68		44 - 121	06/02/18 23:39	06/06/18 13:04	1
2-Fluorophenol	96		46 - 133	06/02/18 23:39	06/06/18 13:04	1
Nitrobenzene-d5	65		41 - 120	06/02/18 23:39	06/06/18 13:04	1
Phenol-d5	92		46 - 125	06/02/18 23:39	06/06/18 13:04	1
Terphenyl-d14	84		35 - 160	06/02/18 23:39	06/06/18 13:04	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Arsenic</b>	<b>9.7</b>		0.57	0.20	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Barium</b>	<b>120</b>		0.57	0.065	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Beryllium</b>	<b>0.69</b>		0.23	0.053	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Boron</b>	<b>6.3</b>		2.9	0.27	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Cadmium</b>	<b>0.51</b>	<b>B</b>	0.11	0.021	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Calcium</b>	<b>11000</b>	<b>B</b>	11	1.9	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Chromium</b>	<b>17</b>		0.57	0.28	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Cobalt</b>	<b>13</b>		0.29	0.075	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Copper</b>	<b>16</b>		0.57	0.16	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Iron</b>	<b>31000</b>		11	6.0	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Lead</b>	<b>18</b>		0.29	0.13	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Magnesium</b>	<b>8100</b>		5.7	2.8	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Manganese</b>	<b>630</b>		0.57	0.083	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Nickel</b>	<b>26</b>		0.57	0.17	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Potassium</b>	<b>1800</b>		29	10	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Selenium</b>	<b>0.38</b>	<b>J</b>	0.57	0.34	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Silver</b>	<b>0.28</b>	<b>J</b>	0.29	0.074	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Sodium</b>	<b>1500</b>		57	8.5	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
Thallium	<0.57		0.57	0.29	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Vanadium</b>	<b>25</b>		0.29	0.068	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1
<b>Zinc</b>	<b>70</b>		1.1	0.50	mg/Kg	☼	05/29/18 06:48	05/30/18 04:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		05/30/18 09:01	05/30/18 18:34	1
Chromium	<0.025		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:34	1
<b>Iron</b>	<b>3.9</b>		0.40	0.20	mg/L		05/30/18 09:01	05/30/18 18:34	1
Lead	<0.0075		0.0075	0.0075	mg/L		05/30/18 09:01	05/30/18 18:34	1

TestAmerica Chicago

# Client Sample Results

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-6

**Client Sample ID: 3082-12-B01**

**Lab Sample ID: 500-145966-14**

Date Collected: 05/24/18 10:30

Matrix: Solid

Date Received: 05/24/18 18:35

Percent Solids: 78.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	20		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:34	1
Nickel	<0.025		0.025	0.010	mg/L		05/30/18 09:01	05/30/18 18:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.035	J	0.050	0.010	mg/L		05/30/18 14:20	05/31/18 22:45	1
Barium	0.83		0.50	0.050	mg/L		05/30/18 14:20	05/31/18 22:45	1
Beryllium	0.0057		0.0040	0.0040	mg/L		05/30/18 14:20	05/31/18 22:45	1
Boron	0.18		0.10	0.050	mg/L		05/30/18 14:20	05/31/18 22:45	1
Cadmium	0.0029	J	0.0050	0.0020	mg/L		05/30/18 14:20	05/31/18 22:45	1
Calcium	26		2.5	0.50	mg/L		05/30/18 14:20	05/31/18 22:45	1
Chromium	0.15		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:45	1
Cobalt	0.063		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:45	1
Iron	190	B	0.40	0.20	mg/L		05/30/18 14:20	05/31/18 22:45	1
Lead	0.11		0.0075	0.0075	mg/L		05/30/18 14:20	05/31/18 22:45	1
Manganese	2.9		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:45	1
Nickel	0.14		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:45	1
Potassium	30	F1	2.5	0.50	mg/L		05/30/18 14:20	05/31/18 22:45	1
Selenium	<0.050		0.050	0.020	mg/L		05/30/18 14:20	05/31/18 22:45	1
Silver	<0.025		0.025	0.010	mg/L		05/30/18 14:20	05/31/18 22:45	1
Zinc	0.42	J	0.50	0.020	mg/L		05/30/18 14:20	05/31/18 22:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	<0.0020		0.0020	0.0020	mg/L		05/30/18 09:01	06/04/18 21:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060	F1	0.0060	0.0060	mg/L		05/30/18 14:20	06/01/18 17:30	1
Thallium	0.0025	F1	0.0020	0.0020	mg/L		05/30/18 14:20	06/01/18 17:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		05/31/18 12:20	06/01/18 16:17	1

### Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.019	0.0065	mg/Kg	☼	05/30/18 13:25	05/31/18 15:44	1

### General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.19	J	0.56	0.19	mg/Kg	☼	06/07/18 14:30	06/07/18 18:18	1
pH	8.3		0.20	0.20	SU			05/31/18 16:56	1

TestAmerica Chicago

# Definitions/Glossary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-6

## 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.
*	RPD of the LCS and LCSD exceeds the control limits

### 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.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

### 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.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

## 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
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

# Accreditation/Certification Summary

Client: Andrews Engineering Inc.  
Project/Site: IDOT - AE7-04

TestAmerica Job ID: 500-145966-6

## Laboratory: TestAmerica Chicago

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Illinois	NELAP	5	100201	04-30-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
6020A	3010A	Solid	Antimony
6020A	3010A	Solid	Thallium
8260B		Water	1,3-Dichloropropene, Total
8260B	5035	Solid	1,3-Dichloropropene, Total
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

# CHAIN OF CUSTODY RECORD

<b>Client Contact</b> Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	<b>Laboratory</b> Lab: <b>Test America - Chicago</b> Address: <b>2417 Bond Street</b> <b>University Park, IL 60484</b> Phone: <b>708-534-5200</b> Contact: <b>Dick Wright</b> email: richard.wright@testamericainc.com	Project Name: <u>16-22-17 16-59 LAKE COUNTY</u> Project No.: <u>PTB 184-006/AE7-04</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>J. Hey / S. K... ..</u>	COC No.: <u>1</u> of <u>1</u> Lab Job No.: <u>500-145966</u> Sample Temp: <u>21, 28, 5.1</u>
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**Special Instructions:**  
 See Table 2 for complete parameter lists and minimum reporting limits.  
 \* If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal.  
 \*\* If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.  
 \*\*\* If total cyanide exceeds Class I Standard, 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	
14	3082-12-1301	5-24-18	10:30	S	X	X					X	X	X	X	X			
15	3082-12-601	5/24/18	13:45	W	X	X					X		X	X				
16	Trip Blank			W														Added by TA
17	↓ #2			S														

Relinquished by: <i>[Signature]</i>	Date/Time: <u>5-24-18 1620</u>	Received by: <i>[Signature]</i>	Date/Time: <u>5-24-18 1620</u>
Relinquished by: <i>[Signature]</i>	Date/Time: <u>5-24-18 1835</u>	Received by: <i>[Signature]</i>	Date/Time: <u>5/25/18 0715</u>
Relinquished by:	Date/Time:	Received by:	Date/Time: