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 t 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: IL HSR Union Pacific RR

Office Phone Number, if available:

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

676-700 W. Baltimore Street

City: Wilmington State: IL Zip Code: 60481

County: Will Township: Wilmington

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

Latitude: 41.30518 (Decimal Degrees) Longitude: -88.15830 (-Decimal Degrees)

Identify how the lat/long data were determined:

☐ GPS ☒ Map Interpolation ☐ Photo Interpolation ☐ Survey ☐ Other

IEPA Site Number(s), if assigned: BOL: 1971105075 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	City:	Schaumburg
State:	IL	State:	IL
Zip Code:	60196-1096	Zip Code:	60196-1096
Phone:	847-705-4101	Phone:	847-705-4101
Contact:	Sam Mead	Contact:	Sam Mead
Email, if available:	Sam.Mead@illinois.gov	Email, if available:	Sam.Mead@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: IL HSR Union Pacific RR

Latitude: 41.30518 Longitude: -88.15830

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 2965-51-B01 WAS SAMPLED ADJACENT TO SITE 2965-51. SEE TABLE 3a AND FIGURE 3 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

TESTAMERICA ANALYTICAL REPORT - JOB ID NUMBER: 500-103200-3

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 55.51(a) 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:

January 15, 2016
Date:

LICENSED PROFESSIONAL GEOLOGIST
SAVO RADULOVIC
196-001303
ILLINOIS

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Semivolatile Organic Compounds (mg/kg) (cont.)
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)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
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc

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 2965-51
Commercial Buildings

Sample ID	2965-51-B01	[1] Most Stringent MAC	[2] Outside a Populated Area MAC	[3] Populated non-Metropolitan Statistical Area MAC	[4] Within Chicago Corporate Limits MAC	[5] Metropolitan Statistical Area MAC	[6] Class I Soil TCLP/SPLP Comparisons Only
Sample Depth (ft)	0-2						
Sample Date	10/28/2015						
PID	0						
Sample pH	8.47						
Matrix	Soil						
No Contaminants of Concern Noted.							

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: 500-103200-3
Client Project/Site: IDOT - IL HSR UPRR - WO 021

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

Attn: Ms. Colleen Grey

Jodie Bracken

Authorized for release by:
11/12/2015 4:56:21 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

Client Sample ID: 2965-51-B01
Date Collected: 10/28/15 11:40
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-8
Matrix: Solid
Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.033**		0.020	0.0038	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Benzene	<0.0049		0.0049	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Bromodichloromethane	<0.0049		0.0049	0.00082	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Bromoform	<0.0049		0.0049	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Bromomethane	<0.0049		0.0049	0.0018	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
2-Butanone (MEK)	<0.0049		0.0049	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Carbon disulfide	<0.0049		0.0049	0.0018	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Carbon tetrachloride	<0.0049		0.0049	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Chlorobenzene	<0.0049		0.0049	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Chloroethane	<0.0049	*	0.0049	0.0020	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Chloroform	<0.0049		0.0049	0.00095	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Chloromethane	<0.0049		0.0049	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
cis-1,2-Dichloroethene	<0.0049		0.0049	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
cis-1,3-Dichloropropene	<0.0049		0.0049	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Dibromochloromethane	<0.0049		0.0049	0.00056	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
1,1-Dichloroethane	<0.0049		0.0049	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
1,2-Dichloroethane	<0.0049		0.0049	0.00072	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
1,1-Dichloroethene	<0.0049		0.0049	0.0018	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
1,2-Dichloropropane	<0.0049		0.0049	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
1,3-Dichloropropene, Total	<0.0049		0.0049	0.0014	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Ethylbenzene	<0.0049		0.0049	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Methylene Chloride	<0.0049		0.0049	0.0037	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Methyl tert-butyl ether	<0.0049		0.0049	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Styrene	<0.0049		0.0049	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
1,1,2,2-Tetrachloroethane	<0.0049		0.0049	0.00077	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Tetrachloroethene	<0.0049		0.0049	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Toluene	<0.0049		0.0049	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
trans-1,2-Dichloroethene	<0.0049		0.0049	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
trans-1,3-Dichloropropene	<0.0049		0.0049	0.0014	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
1,1,1-Trichloroethane	<0.0049		0.0049	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
1,1,2-Trichloroethane	<0.0049		0.0049	0.00094	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Trichloroethene	<0.0049		0.0049	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Vinyl acetate	<0.0049		0.0049	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Vinyl chloride	<0.0049		0.0049	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1
Xylenes, Total	<0.0098		0.0098	0.0018	mg/Kg	☼	10/29/15 07:20	11/03/15 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 122*	*10/29/15 07:20*	*11/03/15 15:14*	*1*
Dibromofluoromethane	*104*		*75 - 120*	*10/29/15 07:20*	*11/03/15 15:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*10/29/15 07:20*	*11/03/15 15:14*	*1*
Toluene-d8 (Surr)	*96*		*75 - 122*	*10/29/15 07:20*	*11/03/15 15:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Benzo[a]anthracene	**0.022**	**J**	0.039	0.0053	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1

Client Sample ID: 2965-51-B01
Date Collected: 10/28/15 11:40
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-8
Matrix: Solid
Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Benzo[b]fluoranthene	**0.038**	**J**	0.039	0.0085	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Carbazole	<0.20		0.20	0.098	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Chrysene	**0.038**	**J**	0.039	0.011	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
4,6-Dinitro-2-methylphenol	<0.79		0.79	0.31	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Fluoranthene	**0.063**		0.039	0.0073	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
2-Methylnaphthalene	<0.039		0.039	0.0072	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
2-Methylphenol	<0.20		0.20	0.063	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
3 & 4 Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.048	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Phenanthrene	**0.062**		0.039	0.0055	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
Phenol	<0.20		0.20	0.087	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1

Client Sample ID: 2965-51-B01
Date Collected: 10/28/15 11:40
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-8
Matrix: Solid
Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	**0.039**		0.039	0.0078	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	11/04/15 07:12	11/06/15 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*25 - 119*	*11/04/15 07:12*	*11/06/15 16:43*	*1*
2-Fluorophenol	*83*		*25 - 110*	*11/04/15 07:12*	*11/06/15 16:43*	*1*
Nitrobenzene-d5	*62*		*25 - 115*	*11/04/15 07:12*	*11/06/15 16:43*	*1*
Phenol-d5	*89*		*31 - 110*	*11/04/15 07:12*	*11/06/15 16:43*	*1*
Terphenyl-d14	*103*		*36 - 134*	*11/04/15 07:12*	*11/06/15 16:43*	*1*
2,4,6-Tribromophenol	*147*	*X*	*35 - 137*	*11/04/15 07:12*	*11/06/15 16:43*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Arsenic	**4.5**		0.55	0.26	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Barium	**55**		0.55	0.10	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Beryllium	**0.48**		0.22	0.048	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Boron	**3.5**		2.8	0.39	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Cadmium	**0.68**		0.11	0.032	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Chromium	**6.3**		0.55	0.095	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Cobalt	**3.9**		0.28	0.062	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Copper	**9.1**		0.55	0.12	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Iron	**10000**		11	4.3	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Lead	**23**		0.28	0.14	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Magnesium	**6700**		5.5	2.2	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Manganese	**180**		0.55	0.11	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Nickel	**7.2**		0.55	0.15	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Selenium	**0.36**	**J**	0.55	0.27	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Vanadium	**13**		0.28	0.081	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1
Zinc	**91**		1.1	0.35	mg/Kg	☼	11/05/15 11:25	11/06/15 04:24	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		11/10/15 16:30	11/11/15 15:23	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/10/15 16:30	11/11/15 15:23	1
Manganese	**3.2**		0.025	0.010	mg/L		11/10/15 16:30	11/11/15 15:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		11/05/15 16:00	11/06/15 17:54	1
Barium	**0.35**	**J**	0.50	0.050	mg/L		11/05/15 16:00	11/06/15 17:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/05/15 16:00	11/06/15 17:54	1
Boron	**1.4**		0.10	0.050	mg/L		11/05/15 16:00	11/06/15 17:54	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/05/15 16:00	11/06/15 17:54	1
Chromium	**0.023**	**J**	0.025	0.010	mg/L		11/05/15 16:00	11/06/15 17:54	1
Cobalt	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 17:54	1

Client Sample ID: 2965-51-B01
Date Collected: 10/28/15 11:40
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-8
Matrix: Solid
Percent Solids: 83.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**24**		0.20	0.20	mg/L		11/05/15 16:00	11/06/15 17:54	1
Lead	**0.042**		0.0075	0.0075	mg/L		11/05/15 16:00	11/06/15 17:54	1
Manganese	**0.31**		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 17:54	1
Nickel	**0.015**	**J**	0.025	0.010	mg/L		11/05/15 16:00	11/06/15 17:54	1
Selenium	<0.050		0.050	0.020	mg/L		11/05/15 16:00	11/06/15 17:54	1
Silver	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 17:54	1
Zinc	**0.33**		0.10	0.020	mg/L		11/05/15 16:00	11/06/15 17:54	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		11/05/15 16:00	11/06/15 13:55	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/05/15 16:00	11/06/15 13:55	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		11/05/15 17:30	11/06/15 11:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.039**		0.017	0.0061	mg/Kg	☼	11/03/15 16:00	11/04/15 11:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.47**		0.200	0.200	SU			11/04/15 16:18	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

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

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

ANDREWS ENGINEERING INC

CHAIN OF CUSTODY RECORD

Client Contact	Laboratory	
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	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: Project No.: AB6-021 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** J. Hey / W. Ill u.

COC No.: 1 of 1

Lab Job No.: 500-103200

Sample Temp:

Special Instructions:

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

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

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

Matrix Key:

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids	Waste Characterization					Comments
					ANALYSES															
8	2965-S1-B01	10/28/15	1140	So. I	X	X					X	X	X	X						0-2'

Relinquished by: Joshua Hey	Date/Time 10/28/15 1655	Received by: Allen Scott	TA-CHI	Date/Time 10/28/15 1655
Relinquished by:	Date/Time	Received by:		Date/Time
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 t 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: IL HSR Union Pacific RR

Office Phone Number, if available:

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

705 W. Baltimore Street

City: Wilmington State: IL Zip Code: 60481

County: Will Township: Wilmington

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

Latitude: 41.30497 (Decimal Degrees) Longitude: -88.15934 (-Decimal Degrees)

Identify how the lat/long data were determined:

☐ GPS ☒ Map Interpolation ☐ Photo Interpolation ☐ Survey ☐ Other

Additional BOL: 1971105068

IEPA Site Number(s), if assigned: BOL: 1971105011 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	City:	Schaumburg
State:	IL	State:	IL
Zip Code:	60196-1096	Zip Code:	60196-1096
Phone:	847-705-4101	Phone:	847-705-4101
Contact:	Sam Mead	Contact:	Sam Mead
Email, if available:	Sam.Mead@illinois.gov	Email, if available:	Sam.Mead@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: IL HSR Union Pacific RR

Latitude: 41.30497 Longitude: -88.15934

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 2965-54-B02 WAS SAMPLED ADJACENT TO SITE 2965-54. 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), 1100.610]:

TESTAMERICA ANALYTICAL REPORT - JOB ID NUMBER: 500-103200-4

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 55.51(a) 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:

January 15, 2016
Date:

LICENSED PROFESSIONAL GEOLOGIST
SAVO RADULOVIC
196-001303
ILLINOIS

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Semivolatile Organic Compounds (mg/kg) (cont.)
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)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
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc

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 2965-54
Shell Gasoline Station

Sample ID	2965-54-B02		[1] Most Stringent MAC	[2] Outside a Populated Area MAC	[3] Populated non-Metropolitan Statistical Area MAC	[4] Within Chicago Corporate Limits MAC	[5] Metropolitan Statistical Area MAC	[6] Class I Soil TCLP/SPLP Comparisons Only
Sample Depth (ft)	0-2							
Sample Date	10/28/2015							
PID	0							
Sample pH	8.12							
Matrix	Soil							
Semivolatile Organic Compounds (mg/kg)								
Benzo(a)pyrene	**1**	**1,2,3**	0.09	0.09	0.98	1.3	2.1	NA
Benzo(b)fluoranthene	**1.8**	**1,2,3,4**	0.9	0.9	0.9	1.5	2.1	NA
Dibenzo(a,h)anthracene	**0.18**	**1,2,3**	0.09	0.09	0.15	0.2	0.42	NA

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: 500-103200-4
Client Project/Site: IDOT - IL HSR UPRR - WO 021

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

Attn: Ms. Colleen Grey

Jodie Bracken

Authorized for release by:
11/12/2015 4:57:20 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

Client Sample ID: 2965-54-B02
Date Collected: 10/28/15 11:30
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-10
Matrix: Solid
Percent Solids: 90.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.019		0.019	0.0037	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Benzene	<0.0048		0.0048	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Bromodichloromethane	<0.0048		0.0048	0.00081	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Bromoform	<0.0048		0.0048	0.00098	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
2-Butanone (MEK)	<0.0048		0.0048	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Carbon disulfide	<0.0048		0.0048	0.0018	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Carbon tetrachloride	<0.0048		0.0048	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Chlorobenzene	<0.0048		0.0048	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Chloroethane	<0.0048	*	0.0048	0.0020	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Chloroform	<0.0048		0.0048	0.00094	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Chloromethane	<0.0048		0.0048	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
cis-1,2-Dichloroethene	<0.0048		0.0048	0.00098	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
cis-1,3-Dichloropropene	<0.0048		0.0048	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Dibromochloromethane	<0.0048		0.0048	0.00056	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
1,1-Dichloroethane	<0.0048		0.0048	0.00099	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
1,2-Dichloroethane	<0.0048		0.0048	0.00072	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
1,1-Dichloroethene	<0.0048		0.0048	0.0018	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
1,2-Dichloropropane	<0.0048		0.0048	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
1,3-Dichloropropene, Total	<0.0048		0.0048	0.0014	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Ethylbenzene	<0.0048		0.0048	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Methylene Chloride	<0.0048		0.0048	0.0036	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.00099	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Methyl tert-butyl ether	<0.0048		0.0048	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Styrene	<0.0048		0.0048	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
1,1,2,2-Tetrachloroethane	<0.0048		0.0048	0.00077	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Tetrachloroethene	<0.0048		0.0048	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Toluene	<0.0048		0.0048	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
trans-1,2-Dichloroethene	<0.0048		0.0048	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
trans-1,3-Dichloropropene	<0.0048		0.0048	0.0014	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
1,1,1-Trichloroethane	<0.0048		0.0048	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
1,1,2-Trichloroethane	<0.0048		0.0048	0.00093	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Trichloroethene	<0.0048		0.0048	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Vinyl acetate	<0.0048		0.0048	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Vinyl chloride	<0.0048		0.0048	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1
Xylenes, Total	<0.0097		0.0097	0.0018	mg/Kg	☼	10/29/15 07:20	11/03/15 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 122*	*10/29/15 07:20*	*11/03/15 16:02*	*1*
Dibromofluoromethane	*102*		*75 - 120*	*10/29/15 07:20*	*11/03/15 16:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*10/29/15 07:20*	*11/03/15 16:02*	*1*
Toluene-d8 (Surr)	*98*		*75 - 122*	*10/29/15 07:20*	*11/03/15 16:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.029**	**J**	0.034	0.0062	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Acenaphthylene	**0.020**	**J**	0.034	0.0046	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Anthracene	**0.18**		0.034	0.0058	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1

Client Sample ID: 2965-54-B02
Date Collected: 10/28/15 11:30
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-10
Matrix: Solid
Percent Solids: 90.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.063	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Carbazole	<0.17		0.17	0.087	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
4-Chloroaniline	<0.70		0.70	0.16	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Dibenz(a,h)anthracene	**0.18**		0.034	0.0067	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Dibenzofuran	<0.17		0.17	0.041	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
2,4-Dichlorophenol	<0.34		0.34	0.082	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Diethyl phthalate	<0.17		0.17	0.059	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Di-n-octyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Fluorene	**0.039**		0.034	0.0049	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Hexachlorobenzene	<0.070		0.070	0.0080	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Hexachloroethane	<0.17		0.17	0.053	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
2-Methylnaphthalene	**0.015**	**J**	0.034	0.0064	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
2-Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Naphthalene	**0.0086**	**J**	0.034	0.0053	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
2-Nitroaniline	<0.17		0.17	0.047	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Nitrobenzene	<0.034		0.034	0.0086	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
N-Nitrosodi-n-propylamine	<0.17		0.17	0.042	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
Phenol	<0.17		0.17	0.077	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
2,4,5-Trichlorophenol	<0.34		0.34	0.079	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	11/04/15 07:12	11/06/15 22:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*96*		*25 - 119*	*11/04/15 07:12*	*11/06/15 22:29*	*1*
2-Fluorophenol	*91*		*25 - 110*	*11/04/15 07:12*	*11/06/15 22:29*	*1*
Nitrobenzene-d5	*90*		*25 - 115*	*11/04/15 07:12*	*11/06/15 22:29*	*1*
Phenol-d5	*97*		*31 - 110*	*11/04/15 07:12*	*11/06/15 22:29*	*1*
Terphenyl-d14	*249*	*X*	*36 - 134*	*11/04/15 07:12*	*11/06/15 22:29*	*1*

Client Sample ID: 2965-54-B02
Date Collected: 10/28/15 11:30
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-10
Matrix: Solid
Percent Solids: 90.6

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	77		35 - 137	11/04/15 07:12	11/06/15 22:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	0.89		0.17	0.023	mg/Kg	☼	11/04/15 07:12	11/09/15 18:13	5
Benzo[a]pyrene	1.0		0.17	0.034	mg/Kg	☼	11/04/15 07:12	11/09/15 18:13	5
Benzo[b]fluoranthene	1.8		0.17	0.037	mg/Kg	☼	11/04/15 07:12	11/09/15 18:13	5
Benzo[g,h,i]perylene	0.34		0.17	0.056	mg/Kg	☼	11/04/15 07:12	11/09/15 18:13	5
Benzo[k]fluoranthene	0.69		0.17	0.051	mg/Kg	☼	11/04/15 07:12	11/09/15 18:13	5
Chrysene	1.2		0.17	0.047	mg/Kg	☼	11/04/15 07:12	11/09/15 18:13	5
Fluoranthene	2.2		0.17	0.032	mg/Kg	☼	11/04/15 07:12	11/09/15 18:13	5
Indeno[1,2,3-cd]pyrene	0.48		0.17	0.045	mg/Kg	☼	11/04/15 07:12	11/09/15 18:13	5
Phenanthrene	0.84		0.17	0.024	mg/Kg	☼	11/04/15 07:12	11/09/15 18:13	5
Pyrene	2.3		0.17	0.034	mg/Kg	☼	11/04/15 07:12	11/09/15 18:13	5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.66	J	1.1	0.22	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Arsenic	2.9		0.54	0.25	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Barium	47		0.54	0.098	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Beryllium	0.37		0.21	0.046	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Boron	4.4		2.7	0.37	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Cadmium	0.42		0.11	0.031	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Chromium	5.9		0.54	0.092	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Cobalt	2.5		0.27	0.060	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Copper	12		0.54	0.12	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Iron	6600		11	4.1	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Lead	42		0.27	0.13	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Magnesium	25000		5.4	2.2	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Manganese	170		0.54	0.11	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Nickel	7.5		0.54	0.15	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Selenium	0.37	J	0.54	0.26	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Thallium	<0.54		0.54	0.26	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Vanadium	7.9		0.27	0.078	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1
Zinc	68		1.1	0.34	mg/Kg	☼	11/05/15 11:25	11/06/15 04:54	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/10/15 16:30	11/11/15 15:33	1
Iron	<0.20		0.20	0.20	mg/L		11/10/15 16:30	11/11/15 15:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		11/05/15 16:00	11/06/15 18:08	1
Barium	0.18	J	0.50	0.050	mg/L		11/05/15 16:00	11/06/15 18:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/05/15 16:00	11/06/15 18:08	1
Boron	0.85		0.10	0.050	mg/L		11/05/15 16:00	11/06/15 18:08	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/05/15 16:00	11/06/15 18:08	1
Chromium	0.017	J	0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:08	1

Client Sample ID: 2965-54-B02
Date Collected: 10/28/15 11:30
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-10
Matrix: Solid
Percent Solids: 90.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:08	1
Iron	**14**		0.20	0.20	mg/L		11/05/15 16:00	11/06/15 18:08	1
Lead	**0.082**		0.0075	0.0075	mg/L		11/05/15 16:00	11/06/15 18:08	1
Manganese	**0.14**		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:08	1
Nickel	**0.012**	**J**	0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:08	1
Selenium	<0.050		0.050	0.020	mg/L		11/05/15 16:00	11/06/15 18:08	1
Silver	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:08	1
Zinc	**0.23**		0.10	0.020	mg/L		11/05/15 16:00	11/06/15 18:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/05/15 16:00	11/06/15 13:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/05/15 16:00	11/06/15 13:56	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		11/05/15 17:30	11/06/15 11:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.027**		0.018	0.0063	mg/Kg	☼	11/03/15 16:00	11/04/15 11:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.12**		0.200	0.200	SU			11/04/15 16:36	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

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.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
F3	Duplicate RPD exceeds the control 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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

CHAIN OF CUSTODY RECORD

ANDREWS ENGINEERING INC

Client Contact	Laboratory	
Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	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: Project No.: AE6-021 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** J. Hey / W. Il L.

COC No.: 1 of 1

Lab Job No.: 500-103200

Sample Temp:

Special Instructions:

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

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

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

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES: VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids	Waste Characterization					Comments
9	2965-54-B01	10/28/15	1055	SOIL	X	X					X	X	X	X						0-2'
10	2965-54-B02	↓	1130	↓	X	X					X	X	X	X						0-2'
11	2965-54-B03	↓	1110	↓	X	X					X	X	X	X						0-2'

Relinquished by:	Date/Time	Received by:	Date/Time
Joshua Hey	10/28/15 1655	Kristin Knott TA-CHI	10/28/15 1655
Relinquished by:	Date/Time	Received by:	Date/Time
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 t 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: IL HSR Union Pacific RR

Office Phone Number, if available:

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

715 W. Baltimore Street

City: Wilmington State: IL Zip Code: 60481

County: Will Township: Wilmington

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

Latitude: 41.30454 (Decimal Degrees) Longitude: -88.16028 (-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	City:	Schaumburg
State:	IL	State:	IL
Zip Code:	60196-1096	Zip Code:	60196-1096
Phone:	847-705-4101	Phone:	847-705-4101
Contact:	Sam Mead	Contact:	Sam Mead
Email, if available:	Sam.Mead@illinois.gov	Email, if available:	Sam.Mead@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: IL HSR Union Pacific RR

Latitude: 41.30454 Longitude: -88.16028

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 2965-55-B01, -B02, AND -B04 THROUGH -B06 WERE SAMPLED ADJACENT TO SITE 2965-55. SEE TABLE 3c 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: 500-103200-5

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 55.51(a) 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:

January 15, 2016
Date:

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Semivolatile Organic Compounds (mg/kg) (cont.)
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)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
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc

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 2965-55
Burger King

Sample ID	2965-55-B01		2965-55-B02		2965-55-B04		2965-55-B05		2965-55-B06		[1] Most Stringent MAC	[2] Outside a Populated Area MAC	[3] Populated non-Metropolitan Statistical Area MAC	[4] Within Chicago Corporate Limits MAC	[5] Metropolitan Statistical Area MAC	[6] Class I Soil TCLP/SPLP Comparisons Only
Sample Depth (ft)	0-2		0-2		0-2		0-2		0-2							
Sample Date	10/28/2015		10/28/2015		10/28/2015		10/28/2015		10/28/2015							
PID	0		0		0		0		0							
Sample pH	7.95		8.45		8.43		8.38		8.45							
Matrix	Soil		Soil		Soil		Soil		Soil							
Semivolatile Organic Compounds (mg/kg)																
Benzo(a)pyrene	**0.46**	**1,2**	**0.091**	**1,2**	**0.23**	**1,2**	**0.058**		ND		0.09	0.09	0.98	1.3	2.1	NA

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: 500-103200-5
Client Project/Site: IDOT - IL HSR UPRR - WO 021

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

Attn: Ms. Colleen Grey

Jodie Bracken

Authorized for release by:
11/12/2015 4:58:22 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

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

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

Client Sample ID: 2965-55-B01
Date Collected: 10/28/15 10:20
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-12
Matrix: Solid
Percent Solids: 85.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.041**		0.020	0.0038	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Benzene	<0.0049		0.0049	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Bromodichloromethane	<0.0049		0.0049	0.00083	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Bromoform	<0.0049		0.0049	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Bromomethane	<0.0049		0.0049	0.0018	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
2-Butanone (MEK)	<0.0049		0.0049	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Carbon disulfide	<0.0049		0.0049	0.0018	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Carbon tetrachloride	<0.0049		0.0049	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Chlorobenzene	<0.0049		0.0049	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Chloroethane	<0.0049	*	0.0049	0.0021	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Chloroform	<0.0049		0.0049	0.00095	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Chloromethane	<0.0049		0.0049	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
cis-1,2-Dichloroethene	<0.0049		0.0049	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
cis-1,3-Dichloropropene	<0.0049		0.0049	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Dibromochloromethane	<0.0049		0.0049	0.00056	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
1,1-Dichloroethane	<0.0049		0.0049	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
1,2-Dichloroethane	<0.0049		0.0049	0.00072	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
1,1-Dichloroethene	<0.0049		0.0049	0.0018	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
1,2-Dichloropropane	<0.0049		0.0049	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
1,3-Dichloropropene, Total	<0.0049		0.0049	0.0014	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Ethylbenzene	<0.0049		0.0049	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Methylene Chloride	<0.0049		0.0049	0.0037	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Methyl tert-butyl ether	<0.0049		0.0049	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Styrene	<0.0049		0.0049	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
1,1,2,2-Tetrachloroethane	<0.0049		0.0049	0.00078	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Tetrachloroethene	<0.0049		0.0049	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Toluene	<0.0049		0.0049	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
trans-1,2-Dichloroethene	<0.0049		0.0049	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
trans-1,3-Dichloropropene	<0.0049		0.0049	0.0014	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
1,1,1-Trichloroethane	<0.0049		0.0049	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
1,1,2-Trichloroethane	<0.0049		0.0049	0.00095	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Trichloroethene	<0.0049		0.0049	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Vinyl acetate	<0.0049		0.0049	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Vinyl chloride	<0.0049		0.0049	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1
Xylenes, Total	<0.0098		0.0098	0.0018	mg/Kg	☼	10/29/15 07:20	11/03/15 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 122*	*10/29/15 07:20*	*11/03/15 16:50*	*1*
Dibromofluoromethane	*110*		*75 - 120*	*10/29/15 07:20*	*11/03/15 16:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 134*	*10/29/15 07:20*	*11/03/15 16:50*	*1*
Toluene-d8 (Surr)	*98*		*75 - 122*	*10/29/15 07:20*	*11/03/15 16:50*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.18		0.18	0.033	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Acenaphthylene	**0.058**	**J**	0.18	0.024	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Anthracene	**0.062**	**J**	0.18	0.031	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Benzo[a]anthracene	**0.36**		0.18	0.025	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5

Client Sample ID: 2965-55-B01
Date Collected: 10/28/15 10:20
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-12
Matrix: Solid
Percent Solids: 85.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**0.46**		0.18	0.036	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Benzo[b]fluoranthene	**0.59**		0.18	0.040	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Benzo[g,h,i]perylene	**0.54**		0.18	0.060	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Benzo[k]fluoranthene	**0.32**		0.18	0.055	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Bis(2-chloroethyl)ether	<0.93		0.93	0.28	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Bis(2-ethylhexyl) phthalate	**0.88**	**J**	0.93	0.34	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Butyl benzyl phthalate	<0.93		0.93	0.35	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Carbazole	<0.93		0.93	0.46	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
4-Chloroaniline	<3.7		3.7	0.87	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
2-Chloronaphthalene	<0.93		0.93	0.20	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
2-Chlorophenol	<0.93		0.93	0.32	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Chrysene	**0.50**		0.18	0.050	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Dibenz(a,h)anthracene	<0.18		0.18	0.036	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Dibenzofuran	<0.93		0.93	0.22	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
1,2-Dichlorobenzene	<0.93		0.93	0.22	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
1,4-Dichlorobenzene	<0.93		0.93	0.24	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
3,3'-Dichlorobenzidine	<0.93		0.93	0.26	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
2,4-Dichlorophenol	<1.8		1.8	0.44	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Diethyl phthalate	<0.93		0.93	0.31	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
2,4-Dimethylphenol	<1.8		1.8	0.70	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Dimethyl phthalate	<0.93		0.93	0.24	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Di-n-butyl phthalate	<0.93		0.93	0.28	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
4,6-Dinitro-2-methylphenol	<3.7		3.7	1.5	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
2,4-Dinitrophenol	<3.7		3.7	3.3	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
2,4-Dinitrotoluene	<0.93		0.93	0.29	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
2,6-Dinitrotoluene	<0.93		0.93	0.36	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Di-n-octyl phthalate	<0.93		0.93	0.30	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Fluoranthene	**0.41**		0.18	0.034	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Fluorene	<0.18		0.18	0.026	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Hexachlorobenzene	<0.37		0.37	0.043	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Hexachlorobutadiene	<0.93		0.93	0.29	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Hexachlorocyclopentadiene	<3.7		3.7	1.1	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Hexachloroethane	<0.93		0.93	0.28	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Indeno[1,2,3-cd]pyrene	**0.56**		0.18	0.048	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Isophorone	<0.93		0.93	0.21	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
2-Methylnaphthalene	**0.050**	**J**	0.18	0.034	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
2-Methylphenol	<0.93		0.93	0.30	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
3 & 4 Methylphenol	<0.93		0.93	0.31	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Naphthalene	<0.18		0.18	0.028	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
2-Nitroaniline	<0.93		0.93	0.25	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
4-Nitroaniline	<1.8		1.8	0.77	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Nitrobenzene	<0.18		0.18	0.046	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
4-Nitrophenol	<3.7		3.7	1.8	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
N-Nitrosodi-n-propylamine	<0.93		0.93	0.23	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
N-Nitrosodiphenylamine	<0.93		0.93	0.22	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
2,2'-oxybis[1-chloropropane]	<0.93		0.93	0.21	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Pentachlorophenol	<3.7		3.7	3.0	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Phenanthrene	**0.46**		0.18	0.026	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
Phenol	<0.93		0.93	0.41	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5

Client Sample ID: 2965-55-B01
Date Collected: 10/28/15 10:20
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-12
Matrix: Solid
Percent Solids: 85.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	**1.2**		0.18	0.037	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
1,2,4-Trichlorobenzene	<0.93		0.93	0.20	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
2,4,5-Trichlorophenol	<1.8		1.8	0.42	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5
2,4,6-Trichlorophenol	<1.8		1.8	0.63	mg/Kg	☼	11/04/15 07:12	11/06/15 23:27	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*111*		*25 - 119*	*11/04/15 07:12*	*11/06/15 23:27*	*5*
2-Fluorophenol	*101*		*25 - 110*	*11/04/15 07:12*	*11/06/15 23:27*	*5*
Nitrobenzene-d5	*105*		*25 - 115*	*11/04/15 07:12*	*11/06/15 23:27*	*5*
Phenol-d5	*106*		*31 - 110*	*11/04/15 07:12*	*11/06/15 23:27*	*5*
Terphenyl-d14	*264*	*X*	*36 - 134*	*11/04/15 07:12*	*11/06/15 23:27*	*5*
2,4,6-Tribromophenol	*99*		*35 - 137*	*11/04/15 07:12*	*11/06/15 23:27*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Arsenic	**3.2**		0.56	0.26	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Barium	**39**		0.56	0.10	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Beryllium	**0.61**		0.22	0.048	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Boron	**15**		2.8	0.39	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Cadmium	**0.69**		0.11	0.032	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Chromium	**15**		0.56	0.096	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Cobalt	**3.7**		0.28	0.063	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Copper	**13**		0.56	0.12	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Iron	**9700**		11	4.3	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Lead	**150**		0.28	0.14	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Magnesium	**37000**		5.6	2.3	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Manganese	**180**		0.56	0.11	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Nickel	**12**		0.56	0.15	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Selenium	<0.56		0.56	0.28	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Thallium	<0.56		0.56	0.27	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Vanadium	**10**		0.28	0.081	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1
Zinc	**160**		1.1	0.35	mg/Kg	☼	11/05/15 11:25	11/06/15 05:12	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		11/10/15 16:30	11/11/15 15:44	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/10/15 16:30	11/11/15 15:44	1
Manganese	**0.15**		0.025	0.010	mg/L		11/10/15 16:30	11/11/15 15:44	1

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		11/05/15 16:00	11/06/15 18:21	1
Barium	**0.29**	**J**	0.50	0.050	mg/L		11/05/15 16:00	11/06/15 18:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/05/15 16:00	11/06/15 18:21	1
Boron	**1.1**		0.10	0.050	mg/L		11/05/15 16:00	11/06/15 18:21	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/05/15 16:00	11/06/15 18:21	1
Chromium	**0.037**		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:21	1
Cobalt	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 021

TestAmerica Job ID: 500-103200-5

Client Sample ID: 2965-55-B01
Date Collected: 10/28/15 10:20
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-12
Matrix: Solid
Percent Solids: 85.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	29		0.20	0.20	mg/L		11/05/15 16:00	11/06/15 18:21	1
Lead	0.18		0.0075	0.0075	mg/L		11/05/15 16:00	11/06/15 18:21	1
Manganese	0.32		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:21	1
Nickel	0.029		0.025	0.010	mg/L		11/07/15 20:00	11/09/15 13:31	1
Selenium	<0.050		0.050	0.020	mg/L		11/05/15 16:00	11/06/15 18:21	1
Silver	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:21	1
Zinc	0.69		0.10	0.020	mg/L		11/05/15 16:00	11/06/15 18:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		11/05/15 16:00	11/06/15 13:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/05/15 16:00	11/06/15 13:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/05/15 17:30	11/06/15 11:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.018	0.0063	mg/Kg	☼	11/03/15 16:00	11/04/15 11:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.95		0.200	0.200	SU			11/04/15 16:47	1

Client Sample ID: 2965-55-B02
Date Collected: 10/28/15 10:27
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-13
Matrix: Solid
Percent Solids: 89.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.021**		0.017	0.0033	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Benzene	<0.0042		0.0042	0.00094	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Bromodichloromethane	<0.0042		0.0042	0.00072	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Bromoform	<0.0042		0.0042	0.00087	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Bromomethane	<0.0042		0.0042	0.0016	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
2-Butanone (MEK)	<0.0042		0.0042	0.0015	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Carbon disulfide	<0.0042		0.0042	0.0016	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Carbon tetrachloride	<0.0042		0.0042	0.00091	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Chlorobenzene	<0.0042		0.0042	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Chloroethane	<0.0042	*	0.0042	0.0018	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Chloroform	<0.0042		0.0042	0.00083	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Chloromethane	<0.0042		0.0042	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
cis-1,2-Dichloroethene	<0.0042		0.0042	0.00087	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
cis-1,3-Dichloropropene	<0.0042		0.0042	0.00097	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Dibromochloromethane	<0.0042		0.0042	0.00049	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
1,1-Dichloroethane	<0.0042		0.0042	0.00087	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
1,2-Dichloroethane	<0.0042		0.0042	0.00063	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
1,1-Dichloroethene	<0.0042		0.0042	0.0015	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
1,2-Dichloropropane	<0.0042		0.0042	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
1,3-Dichloropropene, Total	<0.0042		0.0042	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Ethylbenzene	<0.0042		0.0042	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
2-Hexanone	<0.0042		0.0042	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Methylene Chloride	<0.0042		0.0042	0.0032	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
4-Methyl-2-pentanone (MIBK)	<0.0042		0.0042	0.00087	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Methyl tert-butyl ether	<0.0042		0.0042	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Styrene	<0.0042		0.0042	0.00099	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
1,1,2,2-Tetrachloroethane	<0.0042		0.0042	0.00067	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Tetrachloroethene	<0.0042		0.0042	0.00088	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Toluene	<0.0042		0.0042	0.0015	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
trans-1,2-Dichloroethene	<0.0042		0.0042	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
trans-1,3-Dichloropropene	<0.0042		0.0042	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
1,1,1-Trichloroethane	<0.0042		0.0042	0.00098	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
1,1,2-Trichloroethane	<0.0042		0.0042	0.00082	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Trichloroethene	<0.0042		0.0042	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Vinyl acetate	<0.0042		0.0042	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Vinyl chloride	<0.0042		0.0042	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1
Xylenes, Total	<0.0085		0.0085	0.0016	mg/Kg	☼	10/29/15 07:20	11/03/15 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 122*	*10/29/15 07:20*	*11/03/15 17:14*	*1*
Dibromofluoromethane	*107*		*75 - 120*	*10/29/15 07:20*	*11/03/15 17:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*10/29/15 07:20*	*11/03/15 17:14*	*1*
Toluene-d8 (Surr)	*97*		*75 - 122*	*10/29/15 07:20*	*11/03/15 17:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.013**	**J**	0.036	0.0066	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Acenaphthylene	**0.015**	**J**	0.036	0.0048	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Anthracene	**0.024**	**J**	0.036	0.0061	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Benzo[a]anthracene	**0.074**		0.036	0.0049	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1

Client Sample ID: 2965-55-B02
Date Collected: 10/28/15 10:27
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-13
Matrix: Solid
Percent Solids: 89.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**0.091**		0.036	0.0071	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Benzo[b]fluoranthene	**0.14**		0.036	0.0079	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Benzo[g,h,i]perylene	**0.088**		0.036	0.012	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Benzo[k]fluoranthene	**0.048**		0.036	0.011	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Carbazole	<0.18		0.18	0.091	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Chrysene	**0.18**		0.036	0.010	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Dibenz(a,h)anthracene	**0.026**	**J**	0.036	0.0071	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
2,4-Dinitrophenol	<0.74		0.74	0.64	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Fluoranthene	**0.13**		0.036	0.0068	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Fluorene	**0.016**	**J**	0.036	0.0051	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Indeno[1,2,3-cd]pyrene	**0.073**		0.036	0.0095	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
2-Methylnaphthalene	**0.035**	**J**	0.036	0.0067	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Naphthalene	**0.014**	**J**	0.036	0.0056	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.045	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Phenanthrene	**0.25**		0.036	0.0051	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1

Client Sample ID: 2965-55-B02
Date Collected: 10/28/15 10:27
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-13
Matrix: Solid
Percent Solids: 89.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	**0.29**		0.036	0.0073	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
2,4,5-Trichlorophenol	<0.36		0.36	0.084	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	11/04/15 07:12	11/09/15 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*25 - 119*	*11/04/15 07:12*	*11/09/15 19:31*	*1*
2-Fluorophenol	*73*		*25 - 110*	*11/04/15 07:12*	*11/09/15 19:31*	*1*
Nitrobenzene-d5	*67*		*25 - 115*	*11/04/15 07:12*	*11/09/15 19:31*	*1*
Phenol-d5	*77*		*31 - 110*	*11/04/15 07:12*	*11/09/15 19:31*	*1*
Terphenyl-d14	*226*	*X*	*36 - 134*	*11/04/15 07:12*	*11/09/15 19:31*	*1*
2,4,6-Tribromophenol	*91*		*35 - 137*	*11/04/15 07:12*	*11/09/15 19:31*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.35**	**J**	1.0	0.21	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Arsenic	**3.4**		0.51	0.24	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Barium	**35**		0.51	0.094	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Beryllium	**1.2**		0.21	0.045	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Boron	**31**		2.6	0.36	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Cadmium	**0.57**		0.10	0.030	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Chromium	**9.1**		0.51	0.088	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Cobalt	**3.3**		0.26	0.058	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Copper	**12**		0.51	0.11	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Iron	**12000**		10	4.0	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Lead	**80**		0.26	0.13	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Magnesium	**19000**		5.1	2.1	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Manganese	**130**		0.51	0.10	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Nickel	**13**		0.51	0.14	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Selenium	<0.51		0.51	0.25	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Thallium	<0.51		0.51	0.25	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Vanadium	**10**		0.26	0.075	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1
Zinc	**100**		1.0	0.33	mg/Kg	☼	11/05/15 11:25	11/06/15 05:17	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.0097**		0.0075	0.0075	mg/L		11/10/15 16:30	11/11/15 15:49	1
Iron	**0.20**		0.20	0.20	mg/L		11/10/15 16:30	11/11/15 15:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.011**	**J**	0.050	0.010	mg/L		11/05/15 16:00	11/06/15 18:28	1
Barium	**0.20**	**J**	0.50	0.050	mg/L		11/05/15 16:00	11/06/15 18:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/05/15 16:00	11/06/15 18:28	1
Boron	**1.0**		0.10	0.050	mg/L		11/05/15 16:00	11/06/15 18:28	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/05/15 16:00	11/06/15 18:28	1
Chromium	**0.021**	**J**	0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:28	1
Cobalt	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:28	1
Iron	**13**		0.20	0.20	mg/L		11/05/15 16:00	11/06/15 18:28	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 021

TestAmerica Job ID: 500-103200-5

Client Sample ID: 2965-55-B02
Date Collected: 10/28/15 10:27
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-13
Matrix: Solid
Percent Solids: 89.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.14**		0.0075	0.0075	mg/L		11/05/15 16:00	11/06/15 18:28	1
Manganese	**0.15**		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:28	1
Nickel	**0.015**	**J**	0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:28	1
Selenium	<0.050		0.050	0.020	mg/L		11/05/15 16:00	11/06/15 18:28	1
Silver	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:28	1
Zinc	**0.31**		0.10	0.020	mg/L		11/05/15 16:00	11/06/15 18:28	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		11/05/15 16:00	11/06/15 14:01	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/05/15 16:00	11/06/15 14:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/05/15 17:30	11/06/15 11:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**		0.017	0.0059	mg/Kg	☼	11/03/15 16:00	11/04/15 11:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.45**		0.200	0.200	SU			11/04/15 16:53	1

Client Sample ID: 2965-55-B04
Date Collected: 10/28/15 10:45
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-15
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.022**		0.021	0.0041	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Benzene	<0.0054		0.0054	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Bromodichloromethane	<0.0054		0.0054	0.00090	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Bromoform	<0.0054		0.0054	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Bromomethane	<0.0054		0.0054	0.0020	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
2-Butanone (MEK)	<0.0054		0.0054	0.0019	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Carbon disulfide	<0.0054		0.0054	0.0020	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Carbon tetrachloride	<0.0054		0.0054	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Chlorobenzene	<0.0054		0.0054	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Chloroethane	<0.0054	*	0.0054	0.0022	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Chloroform	<0.0054		0.0054	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Chloromethane	<0.0054		0.0054	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
cis-1,2-Dichloroethene	<0.0054		0.0054	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
cis-1,3-Dichloropropene	<0.0054		0.0054	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Dibromochloromethane	<0.0054		0.0054	0.00062	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
1,1-Dichloroethane	<0.0054		0.0054	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
1,2-Dichloroethane	<0.0054		0.0054	0.00079	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
1,1-Dichloroethene	<0.0054		0.0054	0.0019	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
1,2-Dichloropropane	<0.0054		0.0054	0.0014	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
1,3-Dichloropropene, Total	<0.0054		0.0054	0.0015	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Ethylbenzene	<0.0054		0.0054	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
2-Hexanone	<0.0054		0.0054	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Methylene Chloride	<0.0054		0.0054	0.0040	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Methyl tert-butyl ether	<0.0054		0.0054	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Styrene	<0.0054		0.0054	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
1,1,2,2-Tetrachloroethane	<0.0054		0.0054	0.00085	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Tetrachloroethene	<0.0054		0.0054	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Toluene	<0.0054		0.0054	0.0019	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
trans-1,2-Dichloroethene	<0.0054		0.0054	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
trans-1,3-Dichloropropene	<0.0054		0.0054	0.0015	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
1,1,1-Trichloroethane	<0.0054		0.0054	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
1,1,2-Trichloroethane	<0.0054		0.0054	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Trichloroethene	<0.0054		0.0054	0.0014	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Vinyl acetate	<0.0054		0.0054	0.0014	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Vinyl chloride	<0.0054		0.0054	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1
Xylenes, Total	<0.011		0.011	0.0020	mg/Kg	☼	10/29/15 07:20	11/03/15 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 122*	*10/29/15 07:20*	*11/03/15 18:02*	*1*
Dibromofluoromethane	*109*		*75 - 120*	*10/29/15 07:20*	*11/03/15 18:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 134*	*10/29/15 07:20*	*11/03/15 18:02*	*1*
Toluene-d8 (Surr)	*97*		*75 - 122*	*10/29/15 07:20*	*11/03/15 18:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Acenaphthylene	**0.019**	**J**	0.036	0.0048	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Anthracene	**0.028**	**J**	0.036	0.0060	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Benzo[a]anthracene	**0.19**		0.036	0.0049	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1

Client Sample ID: 2965-55-B04
Date Collected: 10/28/15 10:45
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-15
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**0.23**		0.036	0.0070	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Benzo[b]fluoranthene	**0.36**		0.036	0.0078	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Benzo[g,h,i]perylene	**0.15**		0.036	0.012	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Benzo[k]fluoranthene	**0.15**		0.036	0.011	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Chrysene	**0.28**		0.036	0.0099	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Dibenz(a,h)anthracene	**0.053**		0.036	0.0070	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Fluoranthene	**0.25**		0.036	0.0067	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Fluorene	**0.0065**	**J**	0.036	0.0051	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Indeno[1,2,3-cd]pyrene	**0.18**		0.036	0.0094	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
2-Methylnaphthalene	**0.044**		0.036	0.0067	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Naphthalene	**0.021**	**J**	0.036	0.0056	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.044	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Phenanthrene	**0.33**		0.036	0.0050	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1

Client Sample ID: 2965-55-B04
Date Collected: 10/28/15 10:45
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-15
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	**0.50**		0.036	0.0072	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
2,4,5-Trichlorophenol	<0.36		0.36	0.083	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	11/04/15 07:12	11/06/15 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*25 - 119*	*11/04/15 07:12*	*11/06/15 21:32*	*1*
2-Fluorophenol	*99*		*25 - 110*	*11/04/15 07:12*	*11/06/15 21:32*	*1*
Nitrobenzene-d5	*64*		*25 - 115*	*11/04/15 07:12*	*11/06/15 21:32*	*1*
Phenol-d5	*79*		*31 - 110*	*11/04/15 07:12*	*11/06/15 21:32*	*1*
Terphenyl-d14	*203*	*X*	*36 - 134*	*11/04/15 07:12*	*11/06/15 21:32*	*1*
2,4,6-Tribromophenol	*84*		*35 - 137*	*11/04/15 07:12*	*11/06/15 21:32*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.22	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Arsenic	**2.8**		0.52	0.24	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Barium	**29**		0.52	0.095	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Beryllium	**0.64**		0.21	0.045	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Boron	**13**		2.6	0.36	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Cadmium	**2.0**		0.10	0.030	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Chromium	**6.2**		0.52	0.089	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Cobalt	**2.4**		0.26	0.059	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Copper	**12**		0.52	0.11	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Iron	**8800**		10	4.0	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Lead	**97**		0.26	0.13	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Magnesium	**15000**		5.2	2.1	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Manganese	**100**		0.52	0.10	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Nickel	**8.7**		0.52	0.14	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Selenium	**0.38**	**J**	0.52	0.26	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Silver	<0.26		0.26	0.061	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Vanadium	**9.8**		0.26	0.076	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1
Zinc	**100**		1.0	0.33	mg/Kg	☼	11/05/15 11:25	11/06/15 05:27	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		11/10/15 16:30	11/11/15 15:59	1
Lead	**0.010**		0.0075	0.0075	mg/L		11/10/15 16:30	11/11/15 15:59	1
Manganese	**1.4**		0.025	0.010	mg/L		11/10/15 16:30	11/11/15 15:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.011**	**J**	0.050	0.010	mg/L		11/05/15 16:00	11/06/15 18:41	1
Barium	**0.23**	**J**	0.50	0.050	mg/L		11/05/15 16:00	11/06/15 18:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/05/15 16:00	11/06/15 18:41	1
Boron	**1.3**		0.10	0.050	mg/L		11/05/15 16:00	11/06/15 18:41	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/05/15 16:00	11/06/15 18:41	1
Chromium	**0.026**		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:41	1
Cobalt	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:41	1

Client Sample ID: 2965-55-B04
Date Collected: 10/28/15 10:45
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-15
Matrix: Solid
Percent Solids: 87.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**21**		0.20	0.20	mg/L		11/05/15 16:00	11/06/15 18:41	1
Lead	**0.23**		0.0075	0.0075	mg/L		11/05/15 16:00	11/06/15 18:41	1
Manganese	**0.19**		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:41	1
Nickel	**0.019**	**J**	0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:41	1
Selenium	<0.050		0.050	0.020	mg/L		11/05/15 16:00	11/06/15 18:41	1
Silver	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 18:41	1
Zinc	**0.36**		0.10	0.020	mg/L		11/05/15 16:00	11/06/15 18:41	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		11/05/15 16:00	11/06/15 14:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/05/15 16:00	11/06/15 14:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/05/15 17:30	11/06/15 11:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.025**		0.018	0.0062	mg/Kg	☼	11/03/15 16:00	11/04/15 11:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.43**		0.200	0.200	SU			11/04/15 17:04	1

Client Sample ID: 2965-55-B05
Date Collected: 10/28/15 10:50
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-16
Matrix: Solid
Percent Solids: 88.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0035	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Benzene	<0.0045		0.0045	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Bromodichloromethane	<0.0045		0.0045	0.00077	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Bromoform	<0.0045		0.0045	0.00093	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
2-Butanone (MEK)	<0.0045		0.0045	0.0016	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Carbon disulfide	<0.0045		0.0045	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Carbon tetrachloride	<0.0045		0.0045	0.00097	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Chlorobenzene	<0.0045		0.0045	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Chloroethane	<0.0045	*	0.0045	0.0019	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Chloroform	<0.0045		0.0045	0.00089	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Chloromethane	<0.0045		0.0045	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
cis-1,2-Dichloroethene	<0.0045		0.0045	0.00093	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
cis-1,3-Dichloropropene	<0.0045		0.0045	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Dibromochloromethane	<0.0045		0.0045	0.00052	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
1,1-Dichloroethane	<0.0045		0.0045	0.00094	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
1,2-Dichloroethane	<0.0045		0.0045	0.00067	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
1,1-Dichloroethene	<0.0045		0.0045	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
1,2-Dichloropropane	<0.0045		0.0045	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
1,3-Dichloropropene, Total	<0.0045		0.0045	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Ethylbenzene	<0.0045		0.0045	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Methylene Chloride	<0.0045		0.0045	0.0034	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.00094	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Methyl tert-butyl ether	<0.0045		0.0045	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Styrene	<0.0045		0.0045	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
1,1,2,2-Tetrachloroethane	<0.0045		0.0045	0.00072	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Tetrachloroethene	<0.0045		0.0045	0.00094	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Toluene	<0.0045		0.0045	0.0016	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
trans-1,2-Dichloroethene	<0.0045		0.0045	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
trans-1,3-Dichloropropene	<0.0045		0.0045	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
1,1,1-Trichloroethane	<0.0045		0.0045	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
1,1,2-Trichloroethane	<0.0045		0.0045	0.00088	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Trichloroethene	<0.0045		0.0045	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Vinyl acetate	<0.0045		0.0045	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Vinyl chloride	<0.0045		0.0045	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1
Xylenes, Total	<0.0091		0.0091	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 18:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 122*	*10/29/15 07:20*	*11/03/15 18:26*	*1*
Dibromofluoromethane	*108*		*75 - 120*	*10/29/15 07:20*	*11/03/15 18:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*10/29/15 07:20*	*11/03/15 18:26*	*1*
Toluene-d8 (Surr)	*94*		*75 - 122*	*10/29/15 07:20*	*11/03/15 18:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.036		0.036	0.0065	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Acenaphthylene	**0.0057**	**J**	0.036	0.0048	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Anthracene	**0.0099**	**J**	0.036	0.0060	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Benzo[a]anthracene	**0.039**		0.036	0.0049	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1

Client Sample ID: 2965-55-B05
Date Collected: 10/28/15 10:50
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-16
Matrix: Solid
Percent Solids: 88.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**0.058**		0.036	0.0070	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Benzo[b]fluoranthene	**0.092**		0.036	0.0078	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Benzo[g,h,i]perylene	**0.11**		0.036	0.012	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
4-Chloroaniline	<0.73		0.73	0.17	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Chrysene	**0.070**		0.036	0.0098	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
2,4-Dinitrophenol	<0.73		0.73	0.63	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Fluoranthene	**0.053**		0.036	0.0067	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Indeno[1,2,3-cd]pyrene	**0.076**		0.036	0.0093	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
2-Methylnaphthalene	**0.019**	**J**	0.036	0.0066	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Naphthalene	**0.0067**	**J**	0.036	0.0055	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.044	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Phenanthrene	**0.11**		0.036	0.0050	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1

Client Sample ID: 2965-55-B05
Date Collected: 10/28/15 10:50
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-16
Matrix: Solid
Percent Solids: 88.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	**0.14**		0.036	0.0072	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	11/04/15 07:12	11/06/15 22:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*25 - 119*	*11/04/15 07:12*	*11/06/15 22:01*	*1*
2-Fluorophenol	*98*		*25 - 110*	*11/04/15 07:12*	*11/06/15 22:01*	*1*
Nitrobenzene-d5	*73*		*25 - 115*	*11/04/15 07:12*	*11/06/15 22:01*	*1*
Phenol-d5	*95*		*31 - 110*	*11/04/15 07:12*	*11/06/15 22:01*	*1*
Terphenyl-d14	*229*	*X*	*36 - 134*	*11/04/15 07:12*	*11/06/15 22:01*	*1*
2,4,6-Tribromophenol	*94*		*35 - 137*	*11/04/15 07:12*	*11/06/15 22:01*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.23	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Arsenic	**2.6**		0.55	0.25	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Barium	**32**		0.55	0.10	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Beryllium	**0.56**		0.22	0.048	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Boron	**7.7**		2.8	0.39	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Cadmium	**0.26**		0.11	0.032	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Chromium	**6.4**		0.55	0.095	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Cobalt	**3.0**		0.28	0.062	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Copper	**7.0**		0.55	0.12	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Iron	**9200**		11	4.2	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Lead	**50**		0.28	0.14	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Magnesium	**8100**		5.5	2.2	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Manganese	**140**		0.55	0.11	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Nickel	**6.6**		0.55	0.15	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Selenium	<0.55		0.55	0.27	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Silver	<0.28		0.28	0.064	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Vanadium	**11**		0.28	0.080	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1
Zinc	**48**		1.1	0.35	mg/Kg	☼	11/05/15 11:25	11/06/15 05:32	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		11/10/15 16:30	11/11/15 16:12	1
Lead	<0.0075		0.0075	0.0075	mg/L		11/10/15 16:30	11/11/15 16:12	1
Manganese	**2.5**		0.025	0.010	mg/L		11/10/15 16:30	11/11/15 16:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.015**	**J**	0.050	0.010	mg/L		11/05/15 16:00	11/06/15 19:04	1
Barium	**0.17**	**J**	0.50	0.050	mg/L		11/05/15 16:00	11/06/15 19:04	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/05/15 16:00	11/06/15 19:04	1
Boron	**0.12**		0.10	0.050	mg/L		11/05/15 16:00	11/06/15 19:04	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/05/15 16:00	11/06/15 19:04	1
Chromium	**0.042**		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:04	1
Cobalt	**0.016**	**J**	0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:04	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 021

TestAmerica Job ID: 500-103200-5

Client Sample ID: 2965-55-B05
Date Collected: 10/28/15 10:50
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-16
Matrix: Solid
Percent Solids: 88.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	43		0.20	0.20	mg/L		11/05/15 16:00	11/06/15 19:04	1
Lead	0.19		0.0075	0.0075	mg/L		11/05/15 16:00	11/06/15 19:04	1
Manganese	0.64		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:04	1
Nickel	0.036		0.025	0.010	mg/L		11/07/15 20:00	11/09/15 13:40	1
Selenium	<0.050		0.050	0.020	mg/L		11/05/15 16:00	11/06/15 19:04	1
Silver	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:04	1
Zinc	0.27		0.10	0.020	mg/L		11/05/15 16:00	11/06/15 19:04	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		11/05/15 16:00	11/06/15 14:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/05/15 16:00	11/06/15 14:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/05/15 17:30	11/06/15 11:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029		0.017	0.0060	mg/Kg	☼	11/03/15 16:00	11/04/15 11:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.38		0.200	0.200	SU			11/04/15 17:10	1

Client Sample ID: 2965-55-B06
Date Collected: 10/28/15 11:15
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-17
Matrix: Solid
Percent Solids: 79.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.023		0.023	0.0044	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Benzene	<0.0056		0.0056	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Bromodichloromethane	<0.0056		0.0056	0.00095	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Bromoform	<0.0056		0.0056	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Bromomethane	<0.0056		0.0056	0.0021	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
2-Butanone (MEK)	<0.0056		0.0056	0.0020	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Carbon disulfide	<0.0056		0.0056	0.0021	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Carbon tetrachloride	<0.0056		0.0056	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Chlorobenzene	<0.0056		0.0056	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Chloroethane	<0.0056	*	0.0056	0.0024	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Chloroform	<0.0056		0.0056	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Chloromethane	<0.0056		0.0056	0.0014	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
cis-1,2-Dichloroethene	<0.0056		0.0056	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
cis-1,3-Dichloropropene	<0.0056		0.0056	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Dibromochloromethane	<0.0056		0.0056	0.00065	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
1,1-Dichloroethane	<0.0056		0.0056	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
1,2-Dichloroethane	<0.0056		0.0056	0.00083	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
1,1-Dichloroethene	<0.0056		0.0056	0.0020	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
1,2-Dichloropropane	<0.0056		0.0056	0.0015	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
1,3-Dichloropropene, Total	<0.0056		0.0056	0.0016	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Ethylbenzene	<0.0056		0.0056	0.0014	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
2-Hexanone	<0.0056		0.0056	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Methylene Chloride	<0.0056		0.0056	0.0043	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
4-Methyl-2-pentanone (MIBK)	<0.0056		0.0056	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Methyl tert-butyl ether	<0.0056		0.0056	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Styrene	<0.0056		0.0056	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
1,1,2,2-Tetrachloroethane	<0.0056		0.0056	0.00089	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Tetrachloroethene	<0.0056		0.0056	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Toluene	<0.0056		0.0056	0.0020	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
trans-1,2-Dichloroethene	<0.0056		0.0056	0.0014	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
trans-1,3-Dichloropropene	<0.0056		0.0056	0.0016	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
1,1,1-Trichloroethane	<0.0056		0.0056	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
1,1,2-Trichloroethane	<0.0056		0.0056	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Trichloroethene	<0.0056		0.0056	0.0015	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Vinyl acetate	<0.0056		0.0056	0.0015	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Vinyl chloride	<0.0056		0.0056	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1
Xylenes, Total	<0.011		0.011	0.0021	mg/Kg	☼	10/29/15 07:20	11/03/15 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 122*	*10/29/15 07:20*	*11/03/15 18:50*	*1*
Dibromofluoromethane	*109*		*75 - 120*	*10/29/15 07:20*	*11/03/15 18:50*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*10/29/15 07:20*	*11/03/15 18:50*	*1*
Toluene-d8 (Surr)	*97*		*75 - 122*	*10/29/15 07:20*	*11/03/15 18:50*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Anthracene	**0.013**	**J**	0.040	0.0067	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Benzo[a]anthracene	**0.046**		0.040	0.0054	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1

Client Sample ID: 2965-55-B06
Date Collected: 10/28/15 11:15
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-17
Matrix: Solid
Percent Solids: 79.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Benzo[b]fluoranthene	**0.046**		0.040	0.0086	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Benzo[g,h,i]perylene	**0.045**		0.040	0.013	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Benzo[k]fluoranthene	**0.025**	**J**	0.040	0.012	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Chrysene	**0.096**		0.040	0.011	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
4,6-Dinitro-2-methylphenol	<0.80		0.80	0.32	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Fluoranthene	**0.055**		0.040	0.0074	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Indeno[1,2,3-cd]pyrene	**0.049**		0.040	0.010	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
2-Methylnaphthalene	**0.033**	**J**	0.040	0.0073	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Naphthalene	**0.013**	**J**	0.040	0.0061	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.049	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Phenanthrene	**0.12**		0.040	0.0056	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
Phenol	<0.20		0.20	0.089	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1

Client Sample ID: 2965-55-B06
Date Collected: 10/28/15 11:15
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-17
Matrix: Solid
Percent Solids: 79.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	**0.14**		0.040	0.0079	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	11/04/15 07:12	11/09/15 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*25 - 119*	*11/04/15 07:12*	*11/09/15 21:15*	*1*
2-Fluorophenol	*69*		*25 - 110*	*11/04/15 07:12*	*11/09/15 21:15*	*1*
Nitrobenzene-d5	*64*		*25 - 115*	*11/04/15 07:12*	*11/09/15 21:15*	*1*
Phenol-d5	*71*		*31 - 110*	*11/04/15 07:12*	*11/09/15 21:15*	*1*
Terphenyl-d14	*234*	*X*	*36 - 134*	*11/04/15 07:12*	*11/09/15 21:15*	*1*
2,4,6-Tribromophenol	*78*		*35 - 137*	*11/04/15 07:12*	*11/09/15 21:15*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.25	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Arsenic	**5.8**		0.60	0.28	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Barium	**44**		0.60	0.11	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Beryllium	**0.76**		0.24	0.052	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Boron	**10**		3.0	0.42	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Cadmium	**0.99**		0.12	0.035	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Chromium	**7.8**		0.60	0.10	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Cobalt	**3.3**		0.30	0.067	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Copper	**16**		0.60	0.13	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Iron	**13000**		12	4.6	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Lead	**100**		0.30	0.15	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Magnesium	**10000**		6.0	2.4	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Manganese	**93**		0.60	0.12	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Nickel	**11**		0.60	0.16	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Selenium	**0.43**	**J**	0.60	0.30	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Silver	<0.30		0.30	0.070	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Thallium	<0.60		0.60	0.29	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Vanadium	**14**		0.30	0.087	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1
Zinc	**140**		1.2	0.38	mg/Kg	☼	11/05/15 11:25	11/06/15 05:37	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		11/10/15 16:30	11/11/15 16:17	1
Lead	**0.062**		0.0075	0.0075	mg/L		11/10/15 16:30	11/11/15 16:17	1
Manganese	**1.0**		0.025	0.010	mg/L		11/10/15 16:30	11/11/15 16:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		11/05/15 16:00	11/06/15 19:11	1
Barium	**0.22**	**J**	0.50	0.050	mg/L		11/05/15 16:00	11/06/15 19:11	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/05/15 16:00	11/06/15 19:11	1
Boron	**1.3**		0.10	0.050	mg/L		11/05/15 16:00	11/06/15 19:11	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/05/15 16:00	11/06/15 19:11	1
Chromium	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:11	1
Cobalt	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:11	1

Client Sample ID: 2965-55-B06
Date Collected: 10/28/15 11:15
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-17
Matrix: Solid
Percent Solids: 79.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**6.8**		0.20	0.20	mg/L		11/05/15 16:00	11/06/15 19:11	1
Lead	**0.080**		0.0075	0.0075	mg/L		11/05/15 16:00	11/06/15 19:11	1
Manganese	**0.17**		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:11	1
Nickel	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:11	1
Selenium	<0.050		0.050	0.020	mg/L		11/05/15 16:00	11/06/15 19:11	1
Silver	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:11	1
Zinc	**0.54**		0.10	0.020	mg/L		11/05/15 16:00	11/06/15 19:11	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		11/05/15 16:00	11/06/15 14:04	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/05/15 16:00	11/06/15 14:04	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		11/05/15 17:30	11/06/15 11:31	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.031**		0.018	0.0064	mg/Kg	☼	11/03/15 16:00	11/04/15 11:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.45**		0.200	0.200	SU			11/04/15 17:16	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

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.
X	Surrogate is outside control limits

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484
Phone: 708.534.5200 Fax: 708.534.5211

(optional)
Report To
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Address:
Address:
Phone:
Fax:
E-Mail:

(optional)
Bill To
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-103200

Chain of Custody Number:

Page 1 of 1

Temperature °C of Cooler:

Client: AEI
Client Project #:
Project Name: AE6-021
Project Location/State: Wilmington IL
Lab Project #:
Sampler: J. Hey / W. Ill
Lab PM:

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Preservative	Parameter: VOC	SVOC	Total Metal	SPLP/TCLP	pH/corrosivity	O/G solids				Comments
12		2965-55-B01	10/28/15	1020	6	S		X	X	X	X	X	X				O-21
13		2965-55-B02		1027													
14		2965-55-B03		1036													
15		2965-55-B04		1045													
16		2965-55-B05		1050													
17		2965-55-B06		1115													

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days X 15 Days _____ Other
Requested Due Date

Sample Disposal
[ ] Return to Client [ ] Disposal by Lab [ ] Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
	AEI	10/28/15	1655		TA-CHI	10/28/15	1655
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier
Shipped
Hand Delivered X

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments:

TAL-4124-500 (1209)

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 t 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: IL HSR Union Pacific RR

Office Phone Number, if available:

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

22832 Strip Mine Road

City: Wilmington State: IL Zip Code: 60481

County: Will Township: Wilmington

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

Latitude: 41.30506 (Decimal Degrees) Longitude: -88.16282 (-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	City:	Schaumburg
State:	IL	State:	IL
Zip Code:	60196-1096	Zip Code:	60196-1096
Phone:	847-705-4101	Phone:	847-705-4101
Contact:	Sam Mead	Contact:	Sam Mead
Email, if available:	Sam.Mead@illinois.gov	Email, if available:	Sam.Mead@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: IL HSR Union Pacific RR

Latitude: 41.30506 Longitude: -88.16282

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 2965-61-B02 WAS SAMPLED ADJACENT TO SITE 2965-61. SEE TABLE 3d 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: 500-103200-6

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 55.51(a) 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:

January 15, 2016
Date:

LICENSED PROFESSIONAL GEOLOGIST
SAVO RADULOVIC
196-001303
ILLINOIS

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Semivolatile Organic Compounds (mg/kg) (cont.)
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)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
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Vanadium
Zinc
TCLP/SPLP Inorganics (mg/L)
Antimony
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Iron
Lead
Manganese
Mercury
Nickel
Selenium
Silver
Thallium
Zinc

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 2965-61
Farmstead

Sample ID	2965-61-B02		2965-61-B02 DUP		[1] Most Stringent MAC	[2] Outside a Populated Area MAC	[3] Populated non-Metropolitan Statistical Area MAC	[4] Within Chicago Corporate Limits MAC	[5] Metropolitan Statistical Area MAC	[6] Class I Soil TCLP/SPLP Comparisons Only
Sample Depth (ft)	0-2		0-2							
Sample Date	10/28/2015		10/28/2015							
PID	0		0							
Sample pH	7.54		7.21							
Matrix	Soil		Soil							
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	**0.12**	**1,2**	ND		0.09	0.09	0.98	1.3	2.1	NA

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: 500-103200-6
Client Project/Site: IDOT - IL HSR UPRR - WO 021

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

Attn: Ms. Colleen Grey

Jodie Bracken

Authorized for release by:
11/12/2015 4:59:11 PM
Jodie Bracken, Project Management Assistant II
jodie.bracken@testamericainc.com

Designee for

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

Client Sample ID: 2965-61-B02
Date Collected: 10/28/15 11:50
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-19
Matrix: Solid
Percent Solids: 86.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0039	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Benzene	<0.0051		0.0051	0.0011	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Bromodichloromethane	<0.0051		0.0051	0.00086	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Bromoform	<0.0051		0.0051	0.0010	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
2-Butanone (MEK)	<0.0051		0.0051	0.0018	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Carbon disulfide	<0.0051		0.0051	0.0019	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Carbon tetrachloride	<0.0051		0.0051	0.0011	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Chlorobenzene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Chloroethane	<0.0051		0.0051	0.0021	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Chloroform	<0.0051		0.0051	0.00099	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Chloromethane	<0.0051		0.0051	0.0012	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
cis-1,2-Dichloroethene	<0.0051		0.0051	0.0010	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
cis-1,3-Dichloropropene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Dibromochloromethane	<0.0051		0.0051	0.00058	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
1,1-Dichloroethane	<0.0051		0.0051	0.0010	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
1,2-Dichloroethane	<0.0051		0.0051	0.00075	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
1,1-Dichloroethene	<0.0051		0.0051	0.0018	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
1,2-Dichloropropane	<0.0051		0.0051	0.0013	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
1,3-Dichloropropene, Total	<0.0051		0.0051	0.0014	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Ethylbenzene	<0.0051		0.0051	0.0013	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Methylene Chloride	<0.0051		0.0051	0.0038	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0010	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Methyl tert-butyl ether	<0.0051		0.0051	0.0012	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Styrene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
1,1,2,2-Tetrachloroethane	<0.0051		0.0051	0.00080	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Tetrachloroethene	<0.0051		0.0051	0.0011	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Toluene	<0.0051		0.0051	0.0018	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
trans-1,2-Dichloroethene	<0.0051		0.0051	0.0013	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
trans-1,3-Dichloropropene	<0.0051		0.0051	0.0014	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
1,1,1-Trichloroethane	<0.0051		0.0051	0.0012	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
1,1,2-Trichloroethane	<0.0051		0.0051	0.00098	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Trichloroethene	<0.0051		0.0051	0.0014	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Vinyl acetate	<0.0051		0.0051	0.0014	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Vinyl chloride	<0.0051		0.0051	0.0012	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1
Xylenes, Total	<0.010		0.010	0.0019	mg/Kg	☼	10/29/15 07:20	11/04/15 10:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 122*	*10/29/15 07:20*	*11/04/15 10:36*	*1*
Dibromofluoromethane	*107*		*75 - 120*	*10/29/15 07:20*	*11/04/15 10:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 134*	*10/29/15 07:20*	*11/04/15 10:36*	*1*
Toluene-d8 (Surr)	*96*		*75 - 122*	*10/29/15 07:20*	*11/04/15 10:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Acenaphthylene	**0.0067**	**J**	0.036	0.0048	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Anthracene	**0.0099**	**J**	0.036	0.0061	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Benzo[a]anthracene	**0.090**		0.036	0.0049	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1

Client Sample ID: 2965-61-B02
Date Collected: 10/28/15 11:50
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-19
Matrix: Solid
Percent Solids: 86.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**0.12**		0.036	0.0071	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Benzo[b]fluoranthene	**0.22**		0.036	0.0079	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Benzo[g,h,i]perylene	**0.079**		0.036	0.012	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Benzo[k]fluoranthene	**0.078**		0.036	0.011	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Carbazole	<0.18		0.18	0.092	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Chrysene	**0.16**		0.036	0.010	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0071	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
4,6-Dinitro-2-methylphenol	<0.74		0.74	0.29	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Fluoranthene	**0.18**		0.036	0.0068	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Fluorene	<0.036		0.036	0.0052	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Indeno[1,2,3-cd]pyrene	**0.10**		0.036	0.0095	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
2-Methylnaphthalene	**0.0082**	**J**	0.036	0.0067	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Nitrobenzene	<0.036		0.036	0.0091	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.045	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Phenanthrene	**0.12**		0.036	0.0051	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
Phenol	<0.18		0.18	0.081	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1

Client Sample ID: 2965-61-B02
Date Collected: 10/28/15 11:50
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-19
Matrix: Solid
Percent Solids: 86.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	**0.29**		0.036	0.0073	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
2,4,5-Trichlorophenol	<0.36		0.36	0.084	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	11/04/15 07:12	11/09/15 21:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*25 - 119*	*11/04/15 07:12*	*11/09/15 21:41*	*1*
2-Fluorophenol	*78*		*25 - 110*	*11/04/15 07:12*	*11/09/15 21:41*	*1*
Nitrobenzene-d5	*39*		*25 - 115*	*11/04/15 07:12*	*11/09/15 21:41*	*1*
Phenol-d5	*64*		*31 - 110*	*11/04/15 07:12*	*11/09/15 21:41*	*1*
Terphenyl-d14	*211*	*X*	*36 - 134*	*11/04/15 07:12*	*11/09/15 21:41*	*1*
2,4,6-Tribromophenol	*79*		*35 - 137*	*11/04/15 07:12*	*11/09/15 21:41*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.36**	**J**	1.1	0.23	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Arsenic	**3.4**		0.55	0.25	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Barium	**26**		0.55	0.10	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Beryllium	**0.51**		0.22	0.047	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Boron	**6.4**		2.7	0.38	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Cadmium	**0.78**		0.11	0.032	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Chromium	**5.2**		0.55	0.094	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Cobalt	**2.6**		0.27	0.062	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Copper	**12**		0.55	0.12	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Iron	**7000**		11	4.2	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Lead	**77**		0.27	0.14	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Magnesium	**19000**		5.5	2.2	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Manganese	**130**		0.55	0.11	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Nickel	**9.0**		0.55	0.15	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Selenium	<0.55		0.55	0.27	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Silver	<0.27		0.27	0.064	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Vanadium	**7.3**		0.27	0.080	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1
Zinc	**120**		1.1	0.35	mg/Kg	☼	11/05/15 11:25	11/06/15 05:47	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.033**		0.0075	0.0075	mg/L		11/10/15 16:30	11/11/15 16:27	1
Iron	**1.5**		0.20	0.20	mg/L		11/10/15 16:30	11/11/15 16:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		11/05/15 16:00	11/06/15 19:24	1
Barium	**0.23**	**J**	0.50	0.050	mg/L		11/05/15 16:00	11/06/15 19:24	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/05/15 16:00	11/06/15 19:24	1
Boron	**1.5**		0.10	0.050	mg/L		11/05/15 16:00	11/06/15 19:24	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/05/15 16:00	11/06/15 19:24	1
Chromium	**0.013**	**J**	0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:24	1
Cobalt	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:24	1
Iron	**6.6**		0.20	0.20	mg/L		11/05/15 16:00	11/06/15 19:24	1

Client Sample ID: 2965-61-B02 **Lab Sample ID: 500-103200-19**
Date Collected: 10/28/15 11:50 **Matrix: Solid**
Date Received: 10/28/15 16:55 **Percent Solids: 86.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.088**		0.0075	0.0075	mg/L		11/05/15 16:00	11/06/15 19:24	1
Manganese	**0.10**		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:24	1
Nickel	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:24	1
Selenium	<0.050		0.050	0.020	mg/L		11/05/15 16:00	11/06/15 19:24	1
Silver	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:24	1
Zinc	**0.36**		0.10	0.020	mg/L		11/05/15 16:00	11/06/15 19:24	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		11/05/15 16:00	11/06/15 14:06	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/05/15 16:00	11/06/15 14:06	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		11/05/15 17:30	11/06/15 11:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.031**		0.019	0.0067	mg/Kg	☼	11/03/15 16:00	11/04/15 11:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.54**		0.200	0.200	SU			11/04/15 17:27	1

Client Sample ID: 2965-61-B02 DUP
Date Collected: 10/28/15 11:55
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-20
Matrix: Solid
Percent Solids: 89.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.018		0.018	0.0035	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Benzene	<0.0046		0.0046	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Bromodichloromethane	<0.0046		0.0046	0.00077	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Bromoform	<0.0046		0.0046	0.00093	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Bromomethane	<0.0046		0.0046	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
2-Butanone (MEK)	<0.0046		0.0046	0.0016	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Carbon disulfide	<0.0046		0.0046	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Carbon tetrachloride	<0.0046		0.0046	0.00098	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Chlorobenzene	<0.0046		0.0046	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Chloroethane	<0.0046	*	0.0046	0.0019	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Chloroform	<0.0046		0.0046	0.00089	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Chloromethane	<0.0046		0.0046	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
cis-1,2-Dichloroethene	<0.0046		0.0046	0.00093	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
cis-1,3-Dichloropropene	<0.0046		0.0046	0.0010	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Dibromochloromethane	<0.0046		0.0046	0.00052	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
1,1-Dichloroethane	<0.0046		0.0046	0.00094	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
1,2-Dichloroethane	<0.0046		0.0046	0.00068	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
1,1-Dichloroethene	<0.0046		0.0046	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
1,2-Dichloropropane	<0.0046		0.0046	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
1,3-Dichloropropene, Total	<0.0046		0.0046	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Ethylbenzene	<0.0046		0.0046	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
2-Hexanone	<0.0046		0.0046	0.0014	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Methylene Chloride	<0.0046		0.0046	0.0034	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.00094	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Methyl tert-butyl ether	<0.0046		0.0046	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Styrene	<0.0046		0.0046	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
1,1,2,2-Tetrachloroethane	<0.0046		0.0046	0.00072	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Tetrachloroethene	<0.0046		0.0046	0.00095	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Toluene	<0.0046		0.0046	0.0016	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
trans-1,2-Dichloroethene	<0.0046		0.0046	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
trans-1,3-Dichloropropene	<0.0046		0.0046	0.0013	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
1,1,1-Trichloroethane	<0.0046		0.0046	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
1,1,2-Trichloroethane	<0.0046		0.0046	0.00088	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Trichloroethene	<0.0046		0.0046	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Vinyl acetate	<0.0046		0.0046	0.0012	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Vinyl chloride	<0.0046		0.0046	0.0011	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1
Xylenes, Total	<0.0091		0.0091	0.0017	mg/Kg	☼	10/29/15 07:20	11/03/15 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 122*	*10/29/15 07:20*	*11/03/15 20:01*	*1*
Dibromofluoromethane	*106*		*75 - 120*	*10/29/15 07:20*	*11/03/15 20:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*10/29/15 07:20*	*11/03/15 20:01*	*1*
Toluene-d8 (Surr)	*98*		*75 - 122*	*10/29/15 07:20*	*11/03/15 20:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.035		0.035	0.0064	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Anthracene	<0.035		0.035	0.0059	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Benzo[a]anthracene	**0.015**	**J**	0.035	0.0048	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1

Client Sample ID: 2965-61-B02 DUP
Date Collected: 10/28/15 11:55
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-20
Matrix: Solid
Percent Solids: 89.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.035		0.035	0.0069	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Benzo[b]fluoranthene	<0.035		0.035	0.0076	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Carbazole	<0.18		0.18	0.088	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
4-Chloroaniline	<0.71		0.71	0.17	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Chrysene	**0.029**	**J**	0.035	0.0097	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0068	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
2,4-Dichlorophenol	<0.35		0.35	0.084	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
2,4-Dinitrophenol	<0.71		0.71	0.62	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Fluoranthene	**0.023**	**J**	0.035	0.0066	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Hexachlorobenzene	<0.071		0.071	0.0082	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Hexachlorocyclopentadiene	<0.71		0.71	0.20	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0092	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
2-Methylnaphthalene	<0.035		0.035	0.0065	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
4-Nitrophenol	<0.71		0.71	0.34	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.043	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Pentachlorophenol	<0.71		0.71	0.57	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Phenanthrene	**0.048**		0.035	0.0049	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
Phenol	<0.18		0.18	0.079	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1

Client Sample ID: 2965-61-B02 DUP
Date Collected: 10/28/15 11:55
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-20
Matrix: Solid
Percent Solids: 89.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	**0.035**		0.035	0.0070	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	11/04/15 07:12	11/06/15 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*25 - 119*	*11/04/15 07:12*	*11/06/15 20:05*	*1*
2-Fluorophenol	*85*		*25 - 110*	*11/04/15 07:12*	*11/06/15 20:05*	*1*
Nitrobenzene-d5	*78*		*25 - 115*	*11/04/15 07:12*	*11/06/15 20:05*	*1*
Phenol-d5	*96*		*31 - 110*	*11/04/15 07:12*	*11/06/15 20:05*	*1*
Terphenyl-d14	*166*	*X*	*36 - 134*	*11/04/15 07:12*	*11/06/15 20:05*	*1*
2,4,6-Tribromophenol	*38*		*35 - 137*	*11/04/15 07:12*	*11/06/15 20:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.21**	**J**	1.0	0.21	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Arsenic	**2.7**		0.51	0.23	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Barium	**12**		0.51	0.092	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Beryllium	**0.24**		0.20	0.044	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Boron	**2.2**	**J**	2.5	0.35	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Cadmium	**0.43**		0.10	0.029	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Chromium	**4.2**		0.51	0.087	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Cobalt	**2.6**		0.25	0.057	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Copper	**5.7**		0.51	0.11	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Iron	**6200**		10	3.9	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Lead	**23**		0.25	0.13	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Magnesium	**6800**		5.1	2.1	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Manganese	**100**		0.51	0.10	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Nickel	**6.8**		0.51	0.14	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Selenium	<0.51		0.51	0.25	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Silver	<0.25		0.25	0.059	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Thallium	<0.51		0.51	0.25	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Vanadium	**6.2**		0.25	0.074	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1
Zinc	**54**		1.0	0.32	mg/Kg	☼	11/05/15 11:25	11/06/15 05:53	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		11/10/15 16:30	11/11/15 16:32	1
Iron	<0.20		0.20	0.20	mg/L		11/10/15 16:30	11/11/15 16:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.050		0.050	0.010	mg/L		11/05/15 16:00	11/06/15 19:31	1
Barium	**0.19**	**J**	0.50	0.050	mg/L		11/05/15 16:00	11/06/15 19:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		11/05/15 16:00	11/06/15 19:31	1
Boron	**1.3**		0.10	0.050	mg/L		11/05/15 16:00	11/06/15 19:31	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		11/05/15 16:00	11/06/15 19:31	1
Chromium	**0.010**	**J**	0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:31	1
Cobalt	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:31	1
Iron	**5.7**		0.20	0.20	mg/L		11/05/15 16:00	11/06/15 19:31	1

Client Sample ID: 2965-61-B02 DUP
Date Collected: 10/28/15 11:55
Date Received: 10/28/15 16:55

Lab Sample ID: 500-103200-20
Matrix: Solid
Percent Solids: 89.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.034**		0.0075	0.0075	mg/L		11/05/15 16:00	11/06/15 19:31	1
Manganese	**0.073**		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:31	1
Nickel	**0.015**	**J**	0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:31	1
Selenium	<0.050		0.050	0.020	mg/L		11/05/15 16:00	11/06/15 19:31	1
Silver	<0.025		0.025	0.010	mg/L		11/05/15 16:00	11/06/15 19:31	1
Zinc	**0.27**		0.10	0.020	mg/L		11/05/15 16:00	11/06/15 19:31	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		11/05/15 16:00	11/06/15 14:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L		11/05/15 16:00	11/06/15 14:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		11/05/15 17:30	11/06/15 11:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.015**	**J**	0.018	0.0063	mg/Kg	☼	11/03/15 16:00	11/04/15 11:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.21**		0.200	0.200	SU			11/04/15 17:33	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

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.
X	Surrogate is outside control limits

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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Company:
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Address:
Phone:
Fax:
PO#/Reference#

Chain of Custody Record

Lab Job #: 500-103200

Chain of Custody Number:

Page 1 of 1

Temperature °C of Cooler:

Client: AE1 | Client Project #:
Project Name: AE6-021
Project Location/State: Wilmington, NC | Lab Project #:
Sampler: J. Itey / W. Ill M. | Lab PM:

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	VOC	SVOC	TAL metal	SPLP/TCLP	pH/Corrosivity	%solids				Comments
18		2965-61-B01	10/28/15	1205	6	S	X	X	X	X	X	X				0-2'
19		2965-61-B02	↓	1150	6	S	X	X	X	X	X	X				↓
20		2965-61-B02 DUP	↓	1155	6	S	X	X	X	X	X	X				

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days X 15 Days _____ Other
Requested Due Date _____

Sample Disposal
☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	AE1	10/28/15	1655	[signature]	TA-CHS	10/28/15	1655
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier
Shipped
Hand Delivered X

Matrix Key
WW – Wastewater
W – Water
S – Soil
SL – Sludge
MS – Miscellaneous
OL – Oil
A – Air
SE – Sediment
SO – Soil
L – Leachate
WI – Wipe
DW – Drinking Water
O – Other

Client Comments

Lab Comments: