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: High Speed Rail Chicago - St. Louis Office Phone Number, if available:

Physical Site Location (address, including number and street):
500 S. Washington Street

City: Braidwood State: IL Zip Code: 60408

County: Will Township: Reed

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

Latitude: 41.25300 (Decimal Degrees) Longitude: -88.22677 (-Decimal Degrees)

Identify how the lat/long data were determined:

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

IEPA Site Number(s), if assigned: BOL: 1978165001 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: High Speed Rail Chicago - St. Louis

Latitude: 41.25300 Longitude: -88.22677

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 2920-47-B01 THROUGH 2920-47-B04 WERE SAMPLED ADJACENT TO SITE 2920-47. SEE TABLE 3a AND FIGURE 2 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID: 500-102505-1

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

I, Savo Radulovic, L.P.G. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 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 2920-47

Hileman's Motor Mart

Sample ID	2920-47-B01	2920-47-B02	2920-47-B03	2920-47-B04	[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)	0-4	0-4	0-4	0-4						
Sample Date	10/13/2015	10/13/2015	10/13/2015	10/13/2015						
PID	0	0	0	0						
Sample pH	7.71	7.79	7.66	8.61						
Matrix	Soil	Soil	Soil	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: 500-102505-1
Client Project/Site: IDOT - IL HSR UPRR - WO 019

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

Attn: Ms. Colleen Grey

Jodie Bracken

Authorized for release by:
10/26/2015 3:36:35 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: 2920-47-B01
Date Collected: 10/13/15 10:30
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-1
Matrix: Solid
Percent Solids: 96.6

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	☼	10/14/15 09:20	10/15/15 12:07	1
Benzene	<0.0050		0.0050	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Bromodichloromethane	<0.0050		0.0050	0.00085	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Bromoform	<0.0050		0.0050	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Bromomethane	<0.0050		0.0050	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
2-Butanone (MEK)	<0.0050		0.0050	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Carbon disulfide	<0.0050		0.0050	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Carbon tetrachloride	<0.0050		0.0050	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Chlorobenzene	<0.0050		0.0050	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Chloroethane	<0.0050		0.0050	0.0021	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Chloroform	<0.0050		0.0050	0.00098	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Chloromethane	<0.0050		0.0050	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
cis-1,2-Dichloroethene	<0.0050		0.0050	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
cis-1,3-Dichloropropene	<0.0050		0.0050	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Dibromochloromethane	<0.0050		0.0050	0.00058	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
1,1-Dichloroethane	<0.0050		0.0050	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
1,2-Dichloroethane	<0.0050		0.0050	0.00075	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
1,1-Dichloroethene	<0.0050		0.0050	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
1,2-Dichloropropane	<0.0050		0.0050	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
1,3-Dichloropropene, Total	<0.0050		0.0050	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Ethylbenzene	<0.0050		0.0050	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
2-Hexanone	<0.0050		0.0050	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Methylene Chloride	<0.0050		0.0050	0.0038	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Methyl tert-butyl ether	<0.0050		0.0050	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Styrene	<0.0050		0.0050	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
1,1,2,2-Tetrachloroethane	<0.0050		0.0050	0.00080	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Tetrachloroethene	<0.0050		0.0050	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Toluene	<0.0050		0.0050	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
trans-1,2-Dichloroethene	<0.0050		0.0050	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
trans-1,3-Dichloropropene	<0.0050		0.0050	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
1,1,1-Trichloroethane	<0.0050		0.0050	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
1,1,2-Trichloroethane	<0.0050		0.0050	0.00098	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Trichloroethene	<0.0050		0.0050	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Vinyl acetate	<0.0050		0.0050	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Vinyl chloride	<0.0050		0.0050	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1
Xylenes, Total	<0.010		0.010	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 12:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 122*	*10/14/15 09:20*	*10/15/15 12:07*	*1*
Dibromofluoromethane	*102*		*75 - 120*	*10/14/15 09:20*	*10/15/15 12:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*10/14/15 09:20*	*10/15/15 12:07*	*1*
Toluene-d8 (Surr)	*97*		*75 - 122*	*10/14/15 09:20*	*10/15/15 12:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.033		0.033	0.0060	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Anthracene	<0.033		0.033	0.0055	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1

Client Sample ID: 2920-47-B01
Date Collected: 10/13/15 10:30
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-1
Matrix: Solid
Percent Solids: 96.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Benzo[g,h,i]perylene	<0.033	F1	0.033	0.011	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Carbazole	<0.17		0.17	0.083	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
4-Chloroaniline	<0.67	*	0.67	0.16	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Chrysene	<0.033		0.033	0.0090	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.046	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Dimethyl phthalate	<0.17		0.17	0.043	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
2,4-Dinitrophenol	<0.67	F1 *	0.67	0.58	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Fluorene	<0.033		0.033	0.0047	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Hexachloroethane	<0.17		0.17	0.050	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Indeno[1,2,3-cd]pyrene	<0.033	F1	0.033	0.0086	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Isophorone	<0.17		0.17	0.037	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
2-Methylnaphthalene	<0.033		0.033	0.0061	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
3 & 4 Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
N-Nitrosodi-n-propylamine	<0.17		0.17	0.041	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.038	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Phenanthrene	**0.012**	**J**	0.033	0.0046	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
Phenol	<0.17		0.17	0.074	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1

Client Sample ID: 2920-47-B01
Date Collected: 10/13/15 10:30
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-1
Matrix: Solid
Percent Solids: 96.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.033		0.033	0.0066	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg	☼	10/14/15 15:48	10/17/15 03:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*25 - 119*	*10/14/15 15:48*	*10/17/15 03:27*	*1*
2-Fluorophenol	*80*		*25 - 110*	*10/14/15 15:48*	*10/17/15 03:27*	*1*
Nitrobenzene-d5	*78*		*25 - 115*	*10/14/15 15:48*	*10/17/15 03:27*	*1*
Phenol-d5	*79*		*31 - 110*	*10/14/15 15:48*	*10/17/15 03:27*	*1*
Terphenyl-d14	*100*		*36 - 134*	*10/14/15 15:48*	*10/17/15 03:27*	*1*
2,4,6-Tribromophenol	*38*		*35 - 137*	*10/14/15 15:48*	*10/17/15 03:27*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.21	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Arsenic	**1.0**		0.51	0.24	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Barium	**14**	**B**	0.51	0.094	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Beryllium	**0.18**	**J**	0.21	0.044	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Boron	**0.93**	**J**	2.6	0.36	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Cadmium	**0.041**	**J**	0.10	0.030	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Chromium	**4.3**	**B**	0.51	0.088	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Cobalt	**1.3**		0.26	0.058	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Copper	**1.8**	**B**	0.51	0.11	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Iron	**4000**		10	4.0	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Lead	**2.3**		0.26	0.13	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Magnesium	**430**		5.1	2.1	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Manganese	**25**		0.51	0.10	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Nickel	**3.2**		0.51	0.14	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Selenium	**0.54**		0.51	0.25	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Thallium	<0.51		0.51	0.25	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Vanadium	**7.9**		0.26	0.075	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1
Zinc	**9.0**		1.0	0.33	mg/Kg	☼	10/14/15 11:00	10/14/15 17:31	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.0088**		0.0075	0.0075	mg/L		10/21/15 10:00	10/21/15 17:13	1
Iron	**0.98**	**F1**	0.20	0.20	mg/L		10/21/15 10:00	10/21/15 17:13	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		10/15/15 10:00	10/15/15 16:16	1
Barium	**0.11**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 16:16	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 16:16	1
Boron	**0.068**	**J**	0.10	0.050	mg/L		10/15/15 10:00	10/15/15 16:16	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 16:16	1
Chromium	**0.026**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 16:16	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 16:16	1
Iron	**19**		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 16:16	1

Client Sample ID: 2920-47-B01
Date Collected: 10/13/15 10:30
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-1
Matrix: Solid
Percent Solids: 96.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.012**		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 16:16	1
Manganese	**0.10**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 16:16	1
Nickel	**0.017**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 16:16	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 16:16	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 16:16	1
Zinc	**0.066**	**J**	0.10	0.020	mg/L		10/15/15 10:00	10/15/15 16:16	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		10/15/15 10:00	10/16/15 11:47	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 11:47	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		10/15/15 13:15	10/16/15 08:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.017	0.0059	mg/Kg	☼	10/14/15 14:30	10/15/15 09:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.71**		0.200	0.200	SU			10/16/15 10:10	1

Client Sample ID: 2920-47-B02
Date Collected: 10/13/15 10:35
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-2
Matrix: Solid
Percent Solids: 96.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0040	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Benzene	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Bromodichloromethane	<0.0051		0.0051	0.00087	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Bromoform	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
2-Butanone (MEK)	<0.0051		0.0051	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Carbon disulfide	<0.0051		0.0051	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Carbon tetrachloride	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Chlorobenzene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Chloroethane	<0.0051		0.0051	0.0022	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Chloroform	<0.0051		0.0051	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Chloromethane	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
cis-1,2-Dichloroethene	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
cis-1,3-Dichloropropene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Dibromochloromethane	<0.0051		0.0051	0.00059	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
1,1-Dichloroethane	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
1,2-Dichloroethane	<0.0051		0.0051	0.00076	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
1,1-Dichloroethene	<0.0051		0.0051	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
1,2-Dichloropropane	<0.0051		0.0051	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
1,3-Dichloropropene, Total	<0.0051		0.0051	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Ethylbenzene	<0.0051		0.0051	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Methylene Chloride	<0.0051		0.0051	0.0039	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Methyl tert-butyl ether	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Styrene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
1,1,2,2-Tetrachloroethane	<0.0051		0.0051	0.00082	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Tetrachloroethene	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Toluene	<0.0051		0.0051	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
trans-1,2-Dichloroethene	<0.0051		0.0051	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
trans-1,3-Dichloropropene	<0.0051		0.0051	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
1,1,1-Trichloroethane	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
1,1,2-Trichloroethane	<0.0051		0.0051	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Trichloroethene	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Vinyl acetate	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Vinyl chloride	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1
Xylenes, Total	<0.010		0.010	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 12:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 122*	*10/14/15 09:20*	*10/15/15 12:32*	*1*
Dibromofluoromethane	*104*		*75 - 120*	*10/14/15 09:20*	*10/15/15 12:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 134*	*10/14/15 09:20*	*10/15/15 12:32*	*1*
Toluene-d8 (Surr)	*96*		*75 - 122*	*10/14/15 09:20*	*10/15/15 12:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.033		0.033	0.0060	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Anthracene	<0.033		0.033	0.0056	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1

Client Sample ID: 2920-47-B02
Date Collected: 10/13/15 10:35
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-2
Matrix: Solid
Percent Solids: 96.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.033		0.033	0.0065	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Benzo[k]fluoranthene	<0.033		0.033	0.0099	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Butyl benzyl phthalate	<0.17		0.17	0.064	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Carbazole	<0.17		0.17	0.084	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
4-Chloroaniline	<0.68	*	0.68	0.16	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Chrysene	<0.033		0.033	0.0092	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0065	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
2,4-Dichlorophenol	<0.33		0.33	0.080	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Diethyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Dimethyl phthalate	<0.17		0.17	0.044	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
4,6-Dinitro-2-methylphenol	<0.68		0.68	0.27	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
2,4-Dinitrophenol	<0.68	*	0.68	0.59	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
2,6-Dinitrotoluene	<0.17		0.17	0.066	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Di-n-octyl phthalate	<0.17		0.17	0.055	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Fluorene	<0.033		0.033	0.0047	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Hexachlorobenzene	<0.068		0.068	0.0078	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Hexachlorobutadiene	<0.17		0.17	0.053	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Hexachlorocyclopentadiene	<0.68		0.68	0.19	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0087	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Isophorone	<0.17		0.17	0.038	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
2-Methylnaphthalene	<0.033		0.033	0.0062	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
2-Methylphenol	<0.17		0.17	0.054	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
3 & 4 Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Naphthalene	<0.033		0.033	0.0052	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Nitrobenzene	<0.033		0.033	0.0084	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
4-Nitrophenol	<0.68		0.68	0.32	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
N-Nitrosodi-n-propylamine	<0.17		0.17	0.041	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
N-Nitrosodiphenylamine	<0.17		0.17	0.040	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Pentachlorophenol	<0.68		0.68	0.54	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Phenanthrene	<0.033		0.033	0.0047	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
Phenol	<0.17		0.17	0.075	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1

Client Sample ID: 2920-47-B02
Date Collected: 10/13/15 10:35
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-2
Matrix: Solid
Percent Solids: 96.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.033		0.033	0.0067	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
2,4,5-Trichlorophenol	<0.33		0.33	0.077	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1
2,4,6-Trichlorophenol	<0.33		0.33	0.12	mg/Kg	☼	10/14/15 15:48	10/17/15 03:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*25 - 119*	*10/14/15 15:48*	*10/17/15 03:55*	*1*
2-Fluorophenol	*85*		*25 - 110*	*10/14/15 15:48*	*10/17/15 03:55*	*1*
Nitrobenzene-d5	*83*		*25 - 115*	*10/14/15 15:48*	*10/17/15 03:55*	*1*
Phenol-d5	*82*		*31 - 110*	*10/14/15 15:48*	*10/17/15 03:55*	*1*
Terphenyl-d14	*99*		*36 - 134*	*10/14/15 15:48*	*10/17/15 03:55*	*1*
2,4,6-Tribromophenol	*60*		*35 - 137*	*10/14/15 15:48*	*10/17/15 03:55*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.21	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Arsenic	**1.7**		0.51	0.23	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Barium	**18**	**B**	0.51	0.093	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Beryllium	**0.22**		0.20	0.044	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Boron	**1.1**	**J**	2.5	0.35	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Cadmium	**0.066**	**J**	0.10	0.029	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Chromium	**5.0**	**B**	0.51	0.087	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Cobalt	**1.9**		0.25	0.057	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Copper	**2.9**	**B**	0.51	0.11	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Iron	**4900**		10	3.9	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Lead	**3.0**		0.25	0.13	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Magnesium	**590**		5.1	2.1	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Manganese	**50**		0.51	0.10	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Nickel	**4.6**		0.51	0.14	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Selenium	**0.39**	**J**	0.51	0.25	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Silver	<0.25		0.25	0.059	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Thallium	<0.51		0.51	0.25	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Vanadium	**9.2**		0.25	0.074	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	1
Zinc	**16**		1.0	0.32	mg/Kg	☼	10/14/15 11:00	10/14/15 18:05	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		10/21/15 10:00	10/21/15 17:33	1
Iron	**0.88**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 17:33	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		10/15/15 10:00	10/15/15 16:44	1
Barium	**0.12**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 16:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 16:44	1
Boron	**0.072**	**J**	0.10	0.050	mg/L		10/15/15 10:00	10/15/15 16:44	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 16:44	1
Chromium	**0.011**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 16:44	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 16:44	1
Iron	**8.0**		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 16:44	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-1

Client Sample ID: 2920-47-B02
Date Collected: 10/13/15 10:35
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-2
Matrix: Solid
Percent Solids: 96.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.010		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 16:44	1
Manganese	0.13		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 16:44	1
Nickel	0.011	J	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 16:44	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 16:44	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 16:44	1
Zinc	0.053	J	0.10	0.020	mg/L		10/15/15 10:00	10/15/15 16:44	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		10/15/15 10:00	10/16/15 12:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:03	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		10/15/15 13:15	10/16/15 08:57	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.013	J	0.015	0.0053	mg/Kg	☼	10/14/15 14:30	10/15/15 09:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.79		0.200	0.200	SU			10/16/15 10:25	1

Client Sample ID: 2920-47-B03
Date Collected: 10/13/15 10:40
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-3
Matrix: Solid
Percent Solids: 95.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0041	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Benzene	<0.0053		0.0053	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Bromodichloromethane	<0.0053		0.0053	0.00090	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Bromoform	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Bromomethane	<0.0053		0.0053	0.0020	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
2-Butanone (MEK)	<0.0053		0.0053	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Carbon disulfide	<0.0053		0.0053	0.0020	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Carbon tetrachloride	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Chlorobenzene	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Chloroethane	<0.0053		0.0053	0.0022	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Chloroform	<0.0053		0.0053	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Chloromethane	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
cis-1,2-Dichloroethene	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
cis-1,3-Dichloropropene	<0.0053		0.0053	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Dibromochloromethane	<0.0053		0.0053	0.00061	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
1,1-Dichloroethane	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
1,2-Dichloroethane	<0.0053		0.0053	0.00079	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
1,1-Dichloroethene	<0.0053		0.0053	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
1,2-Dichloropropane	<0.0053		0.0053	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
1,3-Dichloropropene, Total	<0.0053		0.0053	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Ethylbenzene	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
2-Hexanone	<0.0053		0.0053	0.0017	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Methylene Chloride	<0.0053		0.0053	0.0040	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
4-Methyl-2-pentanone (MIBK)	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Methyl tert-butyl ether	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Styrene	<0.0053		0.0053	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
1,1,2,2-Tetrachloroethane	<0.0053		0.0053	0.00085	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Tetrachloroethene	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Toluene	<0.0053		0.0053	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
trans-1,2-Dichloroethene	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
trans-1,3-Dichloropropene	<0.0053		0.0053	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
1,1,1-Trichloroethane	<0.0053		0.0053	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
1,1,2-Trichloroethane	<0.0053		0.0053	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Trichloroethene	<0.0053		0.0053	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Vinyl acetate	<0.0053		0.0053	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Vinyl chloride	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1
Xylenes, Total	<0.011		0.011	0.0020	mg/Kg	☼	10/14/15 09:20	10/15/15 14:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 122*	*10/14/15 09:20*	*10/15/15 14:07*	*1*
Dibromofluoromethane	*99*		*75 - 120*	*10/14/15 09:20*	*10/15/15 14:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*10/14/15 09:20*	*10/15/15 14:07*	*1*
Toluene-d8 (Surr)	*98*		*75 - 122*	*10/14/15 09:20*	*10/15/15 14:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.034		0.034	0.0061	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Acenaphthylene	<0.034		0.034	0.0045	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Anthracene	<0.034		0.034	0.0057	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Benzo[a]anthracene	<0.034		0.034	0.0046	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1

Client Sample ID: 2920-47-B03
Date Collected: 10/13/15 10:40
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-3
Matrix: Solid
Percent Solids: 95.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.034		0.034	0.0066	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Benzo[b]fluoranthene	<0.034		0.034	0.0073	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Benzo[g,h,i]perylene	<0.034		0.034	0.011	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Benzo[k]fluoranthene	<0.034		0.034	0.010	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.051	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.062	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Butyl benzyl phthalate	<0.17		0.17	0.065	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Carbazole	<0.17		0.17	0.085	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
4-Chloroaniline	<0.69	*	0.69	0.16	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
2-Chlorophenol	<0.17		0.17	0.058	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Chrysene	<0.034		0.034	0.0093	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0066	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
2,4-Dichlorophenol	<0.34		0.34	0.081	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Diethyl phthalate	<0.17		0.17	0.058	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Dimethyl phthalate	<0.17		0.17	0.044	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Di-n-butyl phthalate	<0.17		0.17	0.052	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
4,6-Dinitro-2-methylphenol	<0.69		0.69	0.27	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
2,4-Dinitrophenol	<0.69	*	0.69	0.60	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
2,4-Dinitrotoluene	<0.17		0.17	0.054	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
2,6-Dinitrotoluene	<0.17		0.17	0.067	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Di-n-octyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Fluoranthene	<0.034		0.034	0.0063	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Fluorene	<0.034		0.034	0.0048	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Hexachlorobenzene	<0.069		0.069	0.0079	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Hexachlorobutadiene	<0.17		0.17	0.053	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Hexachlorocyclopentadiene	<0.69		0.69	0.20	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Hexachloroethane	<0.17		0.17	0.052	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Indeno[1,2,3-cd]pyrene	<0.034		0.034	0.0088	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Isophorone	<0.17		0.17	0.038	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
2-Methylnaphthalene	<0.034		0.034	0.0063	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
2-Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
3 & 4 Methylphenol	<0.17		0.17	0.057	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Naphthalene	<0.034		0.034	0.0052	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
2-Nitroaniline	<0.17		0.17	0.046	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Nitrobenzene	<0.034		0.034	0.0085	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
4-Nitrophenol	<0.69		0.69	0.32	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
N-Nitrosodi-n-propylamine	<0.17		0.17	0.042	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
N-Nitrosodiphenylamine	<0.17		0.17	0.040	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Pentachlorophenol	<0.69		0.69	0.55	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Phenanthrene	<0.034		0.034	0.0047	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
Phenol	<0.17		0.17	0.076	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1

Client Sample ID: 2920-47-B03 **Lab Sample ID: 500-102505-3**
Date Collected: 10/13/15 10:40 **Matrix: Solid**
Date Received: 10/14/15 07:50 **Percent Solids: 95.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.034		0.034	0.0068	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
2,4,5-Trichlorophenol	<0.34		0.34	0.078	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	10/14/15 15:48	10/17/15 04:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*25 - 119*	*10/14/15 15:48*	*10/17/15 04:23*	*1*
2-Fluorophenol	*90*		*25 - 110*	*10/14/15 15:48*	*10/17/15 04:23*	*1*
Nitrobenzene-d5	*88*		*25 - 115*	*10/14/15 15:48*	*10/17/15 04:23*	*1*
Phenol-d5	*86*		*31 - 110*	*10/14/15 15:48*	*10/17/15 04:23*	*1*
Terphenyl-d14	*105*		*36 - 134*	*10/14/15 15:48*	*10/17/15 04:23*	*1*
2,4,6-Tribromophenol	*55*		*35 - 137*	*10/14/15 15:48*	*10/17/15 04:23*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.21	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Arsenic	**2.0**		0.50	0.23	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Barium	**14**	**B**	0.50	0.092	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Beryllium	**0.21**		0.20	0.043	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Boron	**0.97**	**J**	2.5	0.35	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Cadmium	**0.076**	**J**	0.10	0.029	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Chromium	**4.4**	**B**	0.50	0.086	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Cobalt	**2.1**		0.25	0.057	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Copper	**3.4**	**B**	0.50	0.11	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Iron	**4600**		10	3.9	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Lead	**2.9**		0.25	0.13	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Magnesium	**570**		5.0	2.0	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Manganese	**54**		0.50	0.099	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Nickel	**4.7**		0.50	0.14	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Selenium	<0.50		0.50	0.25	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Silver	<0.25		0.25	0.059	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Thallium	**0.26**	**J**	0.50	0.25	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Vanadium	**8.3**		0.25	0.073	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	1
Zinc	**15**		1.0	0.32	mg/Kg	☼	10/14/15 11:00	10/14/15 18:12	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		10/21/15 10:00	10/21/15 17:38	1
Iron	**0.44**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 17:38	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		10/15/15 10:00	10/15/15 16:54	1
Barium	**0.076**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 16:54	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 16:54	1
Boron	**0.050**	**J**	0.10	0.050	mg/L		10/15/15 10:00	10/15/15 16:54	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 16:54	1
Chromium	**0.014**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 16:54	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 16:54	1
Iron	**11**		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 16:54	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-1

Client Sample ID: 2920-47-B03
Date Collected: 10/13/15 10:40
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-3
Matrix: Solid
Percent Solids: 95.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.012**		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 16:54	1
Manganese	**0.15**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 16:54	1
Nickel	**0.013**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 16:54	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 16:54	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 16:54	1
Zinc	**0.062**	**J**	0.10	0.020	mg/L		10/15/15 10:00	10/15/15 16:54	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		10/15/15 10:00	10/16/15 12:05	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:05	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		10/15/15 13:15	10/16/15 09:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.015**		0.015	0.0053	mg/Kg	☼	10/14/15 14:30	10/15/15 09:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.66**		0.200	0.200	SU			10/16/15 10:33	1

Client Sample ID: 2920-47-B04
Date Collected: 10/13/15 10:45
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-4
Matrix: Solid
Percent Solids: 97.5

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	☼	10/14/15 09:20	10/15/15 14:31	1
Benzene	<0.0045		0.0045	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Bromodichloromethane	<0.0045		0.0045	0.00077	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Bromoform	<0.0045		0.0045	0.00093	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
2-Butanone (MEK)	<0.0045		0.0045	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Carbon disulfide	<0.0045		0.0045	0.0017	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Carbon tetrachloride	<0.0045		0.0045	0.00097	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Chlorobenzene	<0.0045		0.0045	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Chloroethane	<0.0045		0.0045	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Chloroform	<0.0045		0.0045	0.00089	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Chloromethane	<0.0045		0.0045	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
cis-1,2-Dichloroethene	<0.0045		0.0045	0.00093	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
cis-1,3-Dichloropropene	<0.0045		0.0045	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Dibromochloromethane	<0.0045		0.0045	0.00052	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
1,1-Dichloroethane	<0.0045		0.0045	0.00094	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
1,2-Dichloroethane	<0.0045		0.0045	0.00067	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
1,1-Dichloroethene	<0.0045		0.0045	0.0017	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
1,2-Dichloropropane	<0.0045		0.0045	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
1,3-Dichloropropene, Total	<0.0045		0.0045	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Ethylbenzene	<0.0045		0.0045	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Methylene Chloride	<0.0045		0.0045	0.0034	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.00094	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Methyl tert-butyl ether	<0.0045		0.0045	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Styrene	<0.0045		0.0045	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
1,1,2,2-Tetrachloroethane	<0.0045		0.0045	0.00072	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Tetrachloroethene	<0.0045		0.0045	0.00095	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Toluene	<0.0045		0.0045	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
trans-1,2-Dichloroethene	<0.0045		0.0045	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
trans-1,3-Dichloropropene	<0.0045		0.0045	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
1,1,1-Trichloroethane	<0.0045		0.0045	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
1,1,2-Trichloroethane	<0.0045		0.0045	0.00088	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Trichloroethene	<0.0045		0.0045	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Vinyl acetate	<0.0045		0.0045	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Vinyl chloride	<0.0045		0.0045	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1
Xylenes, Total	<0.0091		0.0091	0.0017	mg/Kg	☼	10/14/15 09:20	10/15/15 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 122*	*10/14/15 09:20*	*10/15/15 14:31*	*1*
Dibromofluoromethane	*103*		*75 - 120*	*10/14/15 09:20*	*10/15/15 14:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*10/14/15 09:20*	*10/15/15 14:31*	*1*
Toluene-d8 (Surr)	*97*		*75 - 122*	*10/14/15 09:20*	*10/15/15 14:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.032		0.032	0.0059	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Acenaphthylene	<0.032		0.032	0.0043	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Anthracene	<0.032		0.032	0.0055	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Benzo[a]anthracene	**0.0072**	**J**	0.032	0.0044	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1

Client Sample ID: 2920-47-B04
Date Collected: 10/13/15 10:45
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-4
Matrix: Solid
Percent Solids: 97.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**0.0068**	**J**	0.032	0.0063	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Benzo[b]fluoranthene	**0.012**	**J**	0.032	0.0071	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Benzo[g,h,i]perylene	<0.032		0.032	0.011	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Benzo[k]fluoranthene	<0.032		0.032	0.0096	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Bis(2-chloroethyl)ether	<0.16		0.16	0.049	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Bis(2-ethylhexyl) phthalate	<0.16		0.16	0.060	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Butyl benzyl phthalate	<0.16		0.16	0.062	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Carbazole	<0.16		0.16	0.082	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
4-Chloroaniline	<0.66	*	0.66	0.15	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
2-Chloronaphthalene	<0.16		0.16	0.036	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
2-Chlorophenol	<0.16		0.16	0.056	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Chrysene	**0.010**	**J**	0.032	0.0089	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Dibenz(a,h)anthracene	<0.032		0.032	0.0063	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Dibenzofuran	<0.16		0.16	0.038	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
1,2-Dichlorobenzene	<0.16		0.16	0.039	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
1,4-Dichlorobenzene	<0.16		0.16	0.042	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
3,3'-Dichlorobenzidine	<0.16		0.16	0.046	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
2,4-Dichlorophenol	<0.32		0.32	0.078	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Diethyl phthalate	<0.16		0.16	0.055	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
2,4-Dimethylphenol	<0.32		0.32	0.12	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Dimethyl phthalate	<0.16		0.16	0.043	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Di-n-butyl phthalate	<0.16		0.16	0.050	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
4,6-Dinitro-2-methylphenol	<0.66		0.66	0.26	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
2,4-Dinitrophenol	<0.66	*	0.66	0.58	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
2,4-Dinitrotoluene	<0.16		0.16	0.052	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
2,6-Dinitrotoluene	<0.16		0.16	0.064	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Di-n-octyl phthalate	<0.16		0.16	0.053	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Fluoranthene	**0.015**	**J**	0.032	0.0061	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Fluorene	<0.032		0.032	0.0046	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Hexachlorobenzene	<0.066		0.066	0.0076	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Hexachlorobutadiene	<0.16		0.16	0.051	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Hexachlorocyclopentadiene	<0.66		0.66	0.19	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Hexachloroethane	<0.16		0.16	0.050	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Indeno[1,2,3-cd]pyrene	<0.032		0.032	0.0085	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Isophorone	<0.16		0.16	0.037	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
2-Methylnaphthalene	<0.032		0.032	0.0060	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
2-Methylphenol	<0.16		0.16	0.052	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
3 & 4 Methylphenol	<0.16		0.16	0.054	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Naphthalene	<0.032		0.032	0.0050	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
2-Nitroaniline	<0.16		0.16	0.044	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
4-Nitroaniline	<0.32		0.32	0.14	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Nitrobenzene	<0.032		0.032	0.0082	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
4-Nitrophenol	<0.66		0.66	0.31	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
N-Nitrosodi-n-propylamine	<0.16		0.16	0.040	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
N-Nitrosodiphenylamine	<0.16		0.16	0.039	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
2,2'-oxybis[1-chloropropane]	<0.16		0.16	0.038	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Pentachlorophenol	<0.66		0.66	0.52	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Phenanthrene	**0.0072**	**J**	0.032	0.0046	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
Phenol	<0.16		0.16	0.073	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1

Client Sample ID: 2920-47-B04
Date Collected: 10/13/15 10:45
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-4
Matrix: Solid
Percent Solids: 97.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	**0.014**	**J**	0.032	0.0065	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
1,2,4-Trichlorobenzene	<0.16		0.16	0.035	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
2,4,5-Trichlorophenol	<0.32		0.32	0.075	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1
2,4,6-Trichlorophenol	<0.32		0.32	0.11	mg/Kg	☼	10/14/15 15:48	10/17/15 04:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*25 - 119*	*10/14/15 15:48*	*10/17/15 04:51*	*1*
2-Fluorophenol	*84*		*25 - 110*	*10/14/15 15:48*	*10/17/15 04:51*	*1*
Nitrobenzene-d5	*82*		*25 - 115*	*10/14/15 15:48*	*10/17/15 04:51*	*1*
Phenol-d5	*80*		*31 - 110*	*10/14/15 15:48*	*10/17/15 04:51*	*1*
Terphenyl-d14	*102*		*36 - 134*	*10/14/15 15:48*	*10/17/15 04:51*	*1*
2,4,6-Tribromophenol	*51*		*35 - 137*	*10/14/15 15:48*	*10/17/15 04:51*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.21	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Arsenic	**1.3**		0.51	0.24	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Barium	**12**	**B**	0.51	0.093	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Beryllium	**0.17**	**J**	0.20	0.044	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Boron	**1.7**	**J**	2.5	0.36	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Cadmium	**0.11**		0.10	0.030	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Chromium	**3.8**	**B**	0.51	0.088	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Cobalt	**1.8**		0.25	0.058	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Copper	**3.8**	**B**	0.51	0.11	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Iron	**4200**		10	3.9	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Lead	**4.5**		0.25	0.13	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Magnesium	**6700**		5.1	2.1	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Manganese	**84**		0.51	0.10	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Nickel	**4.2**		0.51	0.14	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Selenium	**0.38**	**J**	0.51	0.25	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Silver	<0.25		0.25	0.060	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Thallium	**0.48**	**J**	0.51	0.25	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Vanadium	**6.8**		0.25	0.074	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1
Zinc	**17**		1.0	0.32	mg/Kg	☼	10/14/15 11:00	10/14/15 18:19	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.27**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 17:44	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/21/15 10:00	10/21/15 17:44	1
Manganese	**0.63**		0.025	0.010	mg/L		10/21/15 10:00	10/21/15 17:44	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		10/15/15 10:00	10/15/15 17:18	1
Barium	**0.075**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 17:18	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 17:18	1
Boron	**0.064**	**J**	0.10	0.050	mg/L		10/15/15 10:00	10/15/15 17:18	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 17:18	1
Chromium	**0.022**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:18	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:18	1

Client Sample ID: 2920-47-B04
Date Collected: 10/13/15 10:45
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-4
Matrix: Solid
Percent Solids: 97.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**17**		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 17:18	1
Lead	**0.021**		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 17:18	1
Manganese	**0.17**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:18	1
Nickel	**0.019**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:18	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 17:18	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:18	1
Zinc	**0.090**	**J**	0.10	0.020	mg/L		10/15/15 10:00	10/15/15 17:18	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		10/15/15 10:00	10/16/15 12:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:08	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		10/15/15 13:15	10/16/15 09:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.010**	**J**	0.015	0.0054	mg/Kg	☼	10/14/15 14:30	10/15/15 09:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.61**		0.200	0.200	SU			10/16/15 10:41	1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	ISTD response or retention time outside acceptable limits

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
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.
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.
F2	MS/MSD RPD exceeds control limits
F3	Duplicate RPD exceeds the control limit

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

Andrews Engineering, Inc
3300 Ginger Creek Drive
Springfield, IL 62711
217-787-2334
Contact: Colleen Grey
email: cgrey@andrews-eng.com

500-102505 COC

Laboratory

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: HSR Braidwood, Will Co.
Project No.: AECo-019
TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ____ Other
Sampler: S. Radulovic / C. Fegley

COC No.: 1 of 1
Lab Job No.: 500-102505
Sample Temp: 3.4, 2.7, 3.1

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
1	2920-47-B01	10/13/15	10:30AM	S	X	X					X	X	X	X						
2	2920-47-B02	↓	10:35AM	↓	↓	↓					↓	↓	↓	↓						
3	2920-47-B03	↓	10:40AM	↓	↓	↓					↓	↓	↓	↓						
4	2920-47-B04	↓	10:45AM	↓	↓	↓					↓	↓	↓	↓						
5	2920-47-B05	↓	11:00AM	↓	↓	↓					↓	↓	↓	↓						
6	2920-47-B05Dup	↓	11:05AM	↓	↓	↓					↓	↓	↓	↓						

Relinquished by:	Date/Time 10/13/15 3:30PM	Received by:	Date/Time 10/13/15 1530
Relinquished by:	Date/Time 10/13/15 1630	Received by:	Date/Time 10/14/15 0750
Relinquished by:	Date/Time	Received by:	Date/Time

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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: High Speed Rail Chicago - St. Louis Office Phone Number, if available:

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

35100 S. IL 53

City: Braidwood State: IL Zip Code: 60408

County: Will Township: Reed

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

Latitude: 41.25089 (Decimal Degrees) Longitude: -88.22811 (-Decimal Degrees)

Identify how the lat/long data were determined:

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

Additional BOL Numbers: 1970155012, 0630055007

IEPA Site Number(s), if assigned: BOL: 0630055005 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: High Speed Rail Chicago - St. Louis

Latitude: 41.25089 Longitude: -88.22811

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 2920-50-B01 THROUGH 2920-50-B12 AND 2920-50-B14 THROUGH 2920-50-B17 WERE SAMPLED ADJACENT TO SITE 2920-50. SEE TABLE 3b AND FIGURES 3 THROUGH 5 OF THE FINAL PRELIMINARY SITE INVESTIGATION REPORT.

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

TEST AMERICA ANALYTICAL REPORT - TEST AMERICA JOB ID: 500-102505-2

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

I, Savo Radulavic, 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, 2015
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 2920-50

Braidwood Generation Station

Sample ID	2920-50-B01	2920-50-B02	2920-50-B03	2920-50-B04	[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)	0-3	0-3	0-3	0-3						
Sample Date	10/13/2015	10/13/2015	10/13/2015	10/13/2015						
PID	0	0	0	0						
Sample pH	8.69	8.23	8.06	8.13						
Matrix	Soil	Soil	Soil	Soil						
No Contaminants of Concern Noted.										

Sample ID	2920-50-B05	2920-50-B06	2920-50-B07	2920-50-B08	[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)	0-3	0-3	0-3	0-3						
Sample Date	10/13/2015	10/13/2015	10/13/2015	10/13/2015						
PID	0	0	0	0						
Sample pH	7.81	6.74	7.47	8.03						
Matrix	Soil	Soil	Soil	Soil						
No Contaminants of Concern Noted.										

Sample ID	2920-50-B09	2920-50-B10	2920-50-B10 DUP	2920-50-B11	[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)	0-3	0-3	0-3	0-3						
Sample Date	10/13/2015	10/13/2015	10/13/2015	10/13/2015						
PID	0	0	0	0						
Sample pH	7.05	6.56	6.58	7.05						
Matrix	Soil	Soil	Soil	Soil						
No Contaminants of Concern Noted.										

Sample ID	2920-50-B12	2920-50-B14	2920-50-B15	2920-50-B16	2920-50-B17	[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)	0-3	0-3	0-3	0-3	0-3						
Sample Date	10/13/2015	10/13/2015	10/13/2015	10/13/2015	10/13/2015						
PID	0	0	0	0	0						
Sample pH	8.05	7.29	7.35	7.85	7.55						
Matrix	Soil	Soil	Soil	Soil	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: 500-102505-2
Client Project/Site: IDOT - IL HSR UPRR - WO 019

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

Attn: Ms. Colleen Grey

Jodie Bracken

Authorized for release by:
10/26/2015 3:38:23 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

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Client Sample ID: 2920-50-B01
Date Collected: 10/13/15 10:20
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-7
Matrix: Solid
Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0038	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Benzene	<0.0049		0.0049	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Bromodichloromethane	<0.0049		0.0049	0.00082	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Bromoform	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Bromomethane	<0.0049		0.0049	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
2-Butanone (MEK)	<0.0049		0.0049	0.0017	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Carbon disulfide	<0.0049		0.0049	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Carbon tetrachloride	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Chlorobenzene	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Chloroethane	<0.0049		0.0049	0.0020	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Chloroform	<0.0049		0.0049	0.00095	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Chloromethane	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
cis-1,2-Dichloroethene	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
cis-1,3-Dichloropropene	<0.0049		0.0049	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Dibromochloromethane	<0.0049		0.0049	0.00056	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
1,1-Dichloroethane	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
1,2-Dichloroethane	<0.0049		0.0049	0.00072	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
1,1-Dichloroethene	<0.0049		0.0049	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
1,2-Dichloropropane	<0.0049		0.0049	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
1,3-Dichloropropene, Total	<0.0049		0.0049	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Ethylbenzene	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Methylene Chloride	<0.0049		0.0049	0.0037	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Methyl tert-butyl ether	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Styrene	<0.0049		0.0049	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
1,1,2,2-Tetrachloroethane	<0.0049		0.0049	0.00077	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Tetrachloroethene	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Toluene	<0.0049		0.0049	0.0017	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
trans-1,2-Dichloroethene	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
trans-1,3-Dichloropropene	<0.0049		0.0049	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
1,1,1-Trichloroethane	<0.0049		0.0049	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
1,1,2-Trichloroethane	<0.0049		0.0049	0.00094	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Trichloroethene	<0.0049		0.0049	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Vinyl acetate	<0.0049		0.0049	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Vinyl chloride	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1
Xylenes, Total	<0.0098		0.0098	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 122*	*10/14/15 09:20*	*10/15/15 15:42*	*1*
Dibromofluoromethane	*105*		*75 - 120*	*10/14/15 09:20*	*10/15/15 15:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*10/14/15 09:20*	*10/15/15 15:42*	*1*
Toluene-d8 (Surr)	*98*		*75 - 122*	*10/14/15 09:20*	*10/15/15 15:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.036		0.036	0.0064	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Acenaphthylene	<0.036		0.036	0.0047	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Anthracene	**0.0067**	**J**	0.036	0.0060	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Benzo[a]anthracene	**0.022**	**J**	0.036	0.0048	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1

Client Sample ID: 2920-50-B01
Date Collected: 10/13/15 10:20
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-7
Matrix: Solid
Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**0.021**	**J**	0.036	0.0069	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Benzo[b]fluoranthene	**0.024**	**J**	0.036	0.0077	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Benzo[k]fluoranthene	**0.019**	**J**	0.036	0.011	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
4-Chloroaniline	<0.72	*	0.72	0.17	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Chrysene	**0.033**	**J**	0.036	0.0097	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0069	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
2,4-Dichlorophenol	<0.36		0.36	0.085	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
2,4-Dinitrophenol	<0.72	*	0.72	0.63	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Fluoranthene	**0.044**		0.036	0.0066	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Fluorene	<0.036		0.036	0.0050	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Indeno[1,2,3-cd]pyrene	**0.010**	**J**	0.036	0.0093	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
2-Methylnaphthalene	**0.025**	**J**	0.036	0.0066	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Naphthalene	**0.011**	**J**	0.036	0.0055	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Nitrobenzene	<0.036		0.036	0.0089	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.044	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Phenanthrene	**0.13**		0.036	0.0050	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
Phenol	<0.18		0.18	0.079	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1

Client Sample ID: 2920-50-B01
Date Collected: 10/13/15 10:20
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-7
Matrix: Solid
Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	**0.045**		0.036	0.0071	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	10/14/15 15:48	10/17/15 06:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*25 - 119*	*10/14/15 15:48*	*10/17/15 06:15*	*1*
2-Fluorophenol	*83*		*25 - 110*	*10/14/15 15:48*	*10/17/15 06:15*	*1*
Nitrobenzene-d5	*81*		*25 - 115*	*10/14/15 15:48*	*10/17/15 06:15*	*1*
Phenol-d5	*83*		*31 - 110*	*10/14/15 15:48*	*10/17/15 06:15*	*1*
Terphenyl-d14	*114*		*36 - 134*	*10/14/15 15:48*	*10/17/15 06:15*	*1*
2,4,6-Tribromophenol	*80*		*35 - 137*	*10/14/15 15:48*	*10/17/15 06:15*	*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	☼	10/16/15 11:00	10/16/15 22:09	1
Arsenic	**2.8**		0.55	0.25	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Barium	**28**		0.55	0.10	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Beryllium	**0.31**		0.22	0.047	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Boron	**2.8**		2.7	0.38	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Cadmium	**0.27**		0.11	0.032	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Chromium	**5.5**	**B**	0.55	0.094	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Cobalt	**2.1**		0.27	0.062	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Copper	**6.9**	**B**	0.55	0.12	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Iron	**6300**		11	4.2	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Lead	**24**		0.27	0.14	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Magnesium	**2200**		5.5	2.2	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Manganese	**260**		0.55	0.11	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Nickel	**4.9**		0.55	0.15	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Selenium	<0.55		0.55	0.27	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Silver	<0.27		0.27	0.064	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Thallium	<0.55		0.55	0.27	mg/Kg	☼	10/16/15 11:00	10/18/15 16:09	1
Vanadium	**8.9**		0.27	0.080	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1
Zinc	**36**		1.1	0.35	mg/Kg	☼	10/16/15 11:00	10/16/15 22:09	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.21**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 18:07	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/21/15 10:00	10/21/15 18:07	1
Manganese	**0.24**		0.025	0.010	mg/L		10/21/15 10:00	10/21/15 18:07	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		10/15/15 10:00	10/15/15 17:39	1
Barium	**0.065**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 17:39	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 17:39	1
Boron	**0.064**	**J**	0.10	0.050	mg/L		10/15/15 10:00	10/15/15 17:39	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 17:39	1
Chromium	**0.013**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:39	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:39	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B01
Date Collected: 10/13/15 10:20
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-7
Matrix: Solid
Percent Solids: 89.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	9.0		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 17:39	1
Lead	0.074		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 17:39	1
Manganese	0.26		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:39	1
Nickel	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:39	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 17:39	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:39	1
Zinc	0.20		0.10	0.020	mg/L		10/15/15 10:00	10/15/15 17:39	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		10/15/15 10:00	10/16/15 12:16	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:16	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		10/15/15 13:15	10/16/15 09:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.018		0.016	0.0056	mg/Kg	☼	10/14/15 14:30	10/15/15 10:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.69		0.200	0.200	SU			10/16/15 11:04	1

Client Sample ID: 2920-50-B02
Date Collected: 10/13/15 10:10
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-8
Matrix: Solid
Percent Solids: 88.8

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	☼	10/14/15 09:20	10/15/15 16:06	1
Benzene	<0.0045		0.0045	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Bromodichloromethane	<0.0045		0.0045	0.00076	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Bromoform	<0.0045		0.0045	0.00092	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Bromomethane	<0.0045		0.0045	0.0017	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
2-Butanone (MEK)	<0.0045		0.0045	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Carbon disulfide	<0.0045		0.0045	0.0017	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Carbon tetrachloride	<0.0045		0.0045	0.00097	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Chlorobenzene	<0.0045		0.0045	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Chloroethane	<0.0045		0.0045	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Chloroform	<0.0045		0.0045	0.00088	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Chloromethane	<0.0045		0.0045	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
cis-1,2-Dichloroethene	<0.0045		0.0045	0.00092	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
cis-1,3-Dichloropropene	<0.0045		0.0045	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Dibromochloromethane	<0.0045		0.0045	0.00052	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
1,1-Dichloroethane	<0.0045		0.0045	0.00093	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
1,2-Dichloroethane	<0.0045		0.0045	0.00067	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
1,1-Dichloroethene	<0.0045		0.0045	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
1,2-Dichloropropane	<0.0045		0.0045	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
1,3-Dichloropropene, Total	<0.0045		0.0045	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Ethylbenzene	<0.0045		0.0045	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
2-Hexanone	<0.0045		0.0045	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Methylene Chloride	<0.0045		0.0045	0.0034	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.00093	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Methyl tert-butyl ether	<0.0045		0.0045	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Styrene	<0.0045		0.0045	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
1,1,2,2-Tetrachloroethane	<0.0045		0.0045	0.00072	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Tetrachloroethene	<0.0045		0.0045	0.00094	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Toluene	<0.0045		0.0045	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
trans-1,2-Dichloroethene	<0.0045		0.0045	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
trans-1,3-Dichloropropene	<0.0045		0.0045	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
1,1,1-Trichloroethane	<0.0045		0.0045	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
1,1,2-Trichloroethane	<0.0045		0.0045	0.00088	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Trichloroethene	<0.0045		0.0045	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Vinyl acetate	<0.0045		0.0045	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Vinyl chloride	<0.0045		0.0045	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1
Xylenes, Total	<0.0090		0.0090	0.0017	mg/Kg	☼	10/14/15 09:20	10/15/15 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 122*	*10/14/15 09:20*	*10/15/15 16:06*	*1*
Dibromofluoromethane	*104*		*75 - 120*	*10/14/15 09:20*	*10/15/15 16:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*10/14/15 09:20*	*10/15/15 16:06*	*1*
Toluene-d8 (Surr)	*97*		*75 - 122*	*10/14/15 09:20*	*10/15/15 16:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.036		0.036	0.0064	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Acenaphthylene	<0.036		0.036	0.0047	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Benzo[a]anthracene	**0.012**	**J**	0.036	0.0048	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1

Client Sample ID: 2920-50-B02
Date Collected: 10/13/15 10:10
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-8
Matrix: Solid
Percent Solids: 88.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	**0.013**	**J**	0.036	0.0069	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Benzo[b]fluoranthene	**0.021**	**J**	0.036	0.0077	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Benzo[k]fluoranthene	**0.013**	**J**	0.036	0.011	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
4-Chloroaniline	<0.72	*	0.72	0.17	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Chrysene	**0.015**	**J**	0.036	0.0098	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0069	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
2,4-Dichlorophenol	<0.36		0.36	0.085	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
2,4-Dinitrophenol	<0.72	*	0.72	0.63	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Fluoranthene	**0.030**	**J**	0.036	0.0066	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Fluorene	<0.036		0.036	0.0050	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0093	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
2-Methylnaphthalene	<0.036		0.036	0.0066	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Naphthalene	<0.036		0.036	0.0055	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Nitrobenzene	<0.036		0.036	0.0089	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.044	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Phenanthrene	**0.024**	**J**	0.036	0.0050	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1

Client Sample ID: 2920-50-B02
Date Collected: 10/13/15 10:10
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-8
Matrix: Solid
Percent Solids: 88.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	**0.028**	**J**	0.036	0.0071	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	10/14/15 15:48	10/17/15 06:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*25 - 119*	*10/14/15 15:48*	*10/17/15 06:43*	*1*
2-Fluorophenol	*82*		*25 - 110*	*10/14/15 15:48*	*10/17/15 06:43*	*1*
Nitrobenzene-d5	*79*		*25 - 115*	*10/14/15 15:48*	*10/17/15 06:43*	*1*
Phenol-d5	*79*		*31 - 110*	*10/14/15 15:48*	*10/17/15 06:43*	*1*
Terphenyl-d14	*104*		*36 - 134*	*10/14/15 15:48*	*10/17/15 06:43*	*1*
2,4,6-Tribromophenol	*84*		*35 - 137*	*10/14/15 15:48*	*10/17/15 06:43*	*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	☼	10/16/15 11:00	10/16/15 22:16	1
Arsenic	**2.3**		0.52	0.24	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Barium	**20**		0.52	0.096	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Beryllium	**0.27**		0.21	0.045	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Boron	**1.3**	**J**	2.6	0.37	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Cadmium	**0.046**	**J**	0.10	0.030	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Chromium	**6.5**	**B**	0.52	0.090	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Cobalt	**1.7**		0.26	0.059	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Copper	**4.7**	**B**	0.52	0.11	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Iron	**6500**		10	4.0	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Lead	**6.1**		0.26	0.13	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Magnesium	**2100**		5.2	2.1	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Manganese	**67**		0.52	0.10	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Nickel	**4.2**		0.52	0.14	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Selenium	<0.52		0.52	0.26	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Silver	<0.26		0.26	0.061	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	10/16/15 11:00	10/18/15 16:13	1
Vanadium	**11**		0.26	0.077	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	1
Zinc	**18**		1.0	0.33	mg/Kg	☼	10/16/15 11:00	10/16/15 22:16	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		10/21/15 10:00	10/21/15 18:12	1
Iron	**0.22**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 18:12	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		10/15/15 10:00	10/15/15 17:46	1
Barium	**0.11**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 17:46	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 17:46	1
Boron	**0.062**	**J**	0.10	0.050	mg/L		10/15/15 10:00	10/15/15 17:46	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 17:46	1
Chromium	**0.034**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:46	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:46	1
Iron	**29**		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 17:46	1

Client Sample ID: 2920-50-B02 **Lab Sample ID: 500-102505-8**
Date Collected: 10/13/15 10:10 **Matrix: Solid**
Date Received: 10/14/15 07:50 **Percent Solids: 88.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.025**		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 17:46	1
Manganese	**0.11**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:46	1
Nickel	**0.022**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:46	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 17:46	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:46	1
Zinc	**0.10**		0.10	0.020	mg/L		10/15/15 10:00	10/15/15 17:46	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		10/15/15 10:00	10/16/15 12:19	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:19	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		10/15/15 13:15	10/16/15 09:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**		0.017	0.0060	mg/Kg	☼	10/14/15 14:30	10/15/15 10:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.23**		0.200	0.200	SU			10/16/15 11:12	1

Client Sample ID: 2920-50-B03
Date Collected: 10/13/15 10:00
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-9
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	<0.021		0.021	0.0040	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Benzene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Bromodichloromethane	<0.0052		0.0052	0.00088	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Bromoform	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Bromomethane	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
2-Butanone (MEK)	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Carbon disulfide	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Carbon tetrachloride	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Chlorobenzene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Chloroethane	<0.0052		0.0052	0.0022	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Chloroform	<0.0052		0.0052	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Chloromethane	<0.0052		0.0052	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
cis-1,2-Dichloroethene	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
cis-1,3-Dichloropropene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Dibromochloromethane	<0.0052		0.0052	0.00060	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
1,1-Dichloroethane	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
1,2-Dichloroethane	<0.0052		0.0052	0.00077	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
1,1-Dichloroethene	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
1,2-Dichloropropane	<0.0052		0.0052	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
1,3-Dichloropropene, Total	<0.0052		0.0052	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Ethylbenzene	<0.0052		0.0052	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Methylene Chloride	<0.0052		0.0052	0.0039	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Methyl tert-butyl ether	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Styrene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
1,1,2,2-Tetrachloroethane	<0.0052		0.0052	0.00083	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Tetrachloroethene	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Toluene	<0.0052		0.0052	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
trans-1,2-Dichloroethene	<0.0052		0.0052	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
trans-1,3-Dichloropropene	<0.0052		0.0052	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
1,1,1-Trichloroethane	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
1,1,2-Trichloroethane	<0.0052		0.0052	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Trichloroethene	<0.0052		0.0052	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Vinyl acetate	<0.0052		0.0052	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Vinyl chloride	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1
Xylenes, Total	<0.010		0.010	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 122*	*10/14/15 09:20*	*10/15/15 16:30*	*1*
Dibromofluoromethane	*104*		*75 - 120*	*10/14/15 09:20*	*10/15/15 16:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 134*	*10/14/15 09:20*	*10/15/15 16:30*	*1*
Toluene-d8 (Surr)	*96*		*75 - 122*	*10/14/15 09:20*	*10/15/15 16:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Anthracene	**0.0087**	**J**	0.040	0.0068	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Benzo[a]anthracene	**0.029**	**J**	0.040	0.0055	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1

Client Sample ID: 2920-50-B03
Date Collected: 10/13/15 10:00
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-9
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	**0.033**	**J**	0.040	0.0079	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Benzo[b]fluoranthene	**0.046**		0.040	0.0088	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Benzo[g,h,i]perylene	**0.019**	**J**	0.040	0.013	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Benzo[k]fluoranthene	**0.038**	**J**	0.040	0.012	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Butyl benzyl phthalate	<0.20		0.20	0.078	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
4-Chloroaniline	<0.82	*	0.82	0.19	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
2-Chlorophenol	<0.20		0.20	0.070	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Chrysene	**0.047**		0.040	0.011	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
4,6-Dinitro-2-methylphenol	<0.82		0.82	0.33	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
2,4-Dinitrophenol	<0.82	*	0.82	0.72	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Fluoranthene	**0.070**		0.040	0.0076	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Indeno[1,2,3-cd]pyrene	**0.018**	**J**	0.040	0.011	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
2-Methylnaphthalene	**0.063**		0.040	0.0075	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Naphthalene	**0.016**	**J**	0.040	0.0063	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.050	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Phenanthrene	**0.14**		0.040	0.0057	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
Phenol	<0.20		0.20	0.091	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1

Client Sample ID: 2920-50-B03 **Lab Sample ID: 500-102505-9**
Date Collected: 10/13/15 10:00 **Matrix: Solid**
Date Received: 10/14/15 07:50 **Percent Solids: 79.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	**0.065**		0.040	0.0081	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	10/14/15 15:48	10/21/15 01:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*25 - 119*	*10/14/15 15:48*	*10/21/15 01:54*	*1*
2-Fluorophenol	*83*		*25 - 110*	*10/14/15 15:48*	*10/21/15 01:54*	*1*
Nitrobenzene-d5	*81*		*25 - 115*	*10/14/15 15:48*	*10/21/15 01:54*	*1*
Phenol-d5	*79*		*31 - 110*	*10/14/15 15:48*	*10/21/15 01:54*	*1*
Terphenyl-d14	*103*		*36 - 134*	*10/14/15 15:48*	*10/21/15 01:54*	*1*
2,4,6-Tribromophenol	*83*		*35 - 137*	*10/14/15 15:48*	*10/21/15 01:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.26	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Arsenic	**5.8**		0.62	0.29	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Barium	**37**		0.62	0.11	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Beryllium	**0.36**		0.25	0.054	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Boron	**2.5**	**J**	3.1	0.44	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Cadmium	**0.24**		0.12	0.036	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Chromium	**7.2**	**B**	0.62	0.11	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Cobalt	**1.3**		0.31	0.070	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Copper	**8.8**	**B**	0.62	0.14	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Iron	**10000**		12	4.8	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Lead	**12**		0.31	0.16	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Magnesium	**1400**		6.2	2.5	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Manganese	**50**		0.62	0.12	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Nickel	**5.4**		0.62	0.17	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Selenium	**0.57**	**J**	0.62	0.31	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Silver	<0.31		0.31	0.073	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Thallium	<0.62		0.62	0.31	mg/Kg	☼	10/16/15 11:00	10/18/15 16:25	1
Vanadium	**16**		0.31	0.091	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1
Zinc	**24**		1.2	0.39	mg/Kg	☼	10/16/15 11:00	10/16/15 22:23	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.34**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 18:17	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/21/15 10:00	10/21/15 18:17	1
Manganese	**0.053**		0.025	0.010	mg/L		10/21/15 10:00	10/21/15 18:17	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		10/15/15 10:00	10/15/15 17:53	1
Barium	**0.13**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 17:53	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 17:53	1
Boron	**0.060**	**J**	0.10	0.050	mg/L		10/15/15 10:00	10/15/15 17:53	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 17:53	1
Chromium	**0.032**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:53	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:53	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B03
Date Collected: 10/13/15 10:00
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-9
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	24		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 17:53	1
Lead	0.042		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 17:53	1
Manganese	0.16		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:53	1
Nickel	0.019	J	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:53	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 17:53	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 17:53	1
Zinc	0.14		0.10	0.020	mg/L		10/15/15 10:00	10/15/15 17:53	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		10/15/15 10:00	10/16/15 12:21	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:21	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		10/15/15 13:15	10/16/15 09:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033		0.021	0.0073	mg/Kg	☼	10/14/15 14:30	10/15/15 10:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.06		0.200	0.200	SU			10/16/15 11:20	1

Client Sample ID: 2920-50-B04
Date Collected: 10/13/15 09:55
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-10
Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0041	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Benzene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Bromodichloromethane	<0.0052		0.0052	0.00089	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Bromoform	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Bromomethane	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
2-Butanone (MEK)	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Carbon disulfide	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Carbon tetrachloride	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Chlorobenzene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Chloroethane	<0.0052		0.0052	0.0022	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Chloroform	<0.0052		0.0052	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Chloromethane	<0.0052		0.0052	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
cis-1,2-Dichloroethene	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
cis-1,3-Dichloropropene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Dibromochloromethane	<0.0052		0.0052	0.00060	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
1,1-Dichloroethane	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
1,2-Dichloroethane	<0.0052		0.0052	0.00078	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
1,1-Dichloroethene	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
1,2-Dichloropropane	<0.0052		0.0052	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
1,3-Dichloropropene, Total	<0.0052		0.0052	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Ethylbenzene	<0.0052		0.0052	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Methylene Chloride	<0.0052		0.0052	0.0040	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Methyl tert-butyl ether	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Styrene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
1,1,2,2-Tetrachloroethane	<0.0052		0.0052	0.00083	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Tetrachloroethene	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Toluene	<0.0052		0.0052	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
trans-1,2-Dichloroethene	<0.0052		0.0052	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
trans-1,3-Dichloropropene	<0.0052		0.0052	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
1,1,1-Trichloroethane	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
1,1,2-Trichloroethane	<0.0052		0.0052	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Trichloroethene	<0.0052		0.0052	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Vinyl acetate	<0.0052		0.0052	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Vinyl chloride	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1
Xylenes, Total	<0.010		0.010	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 122*	*10/14/15 09:20*	*10/15/15 16:54*	*1*
Dibromofluoromethane	*103*		*75 - 120*	*10/14/15 09:20*	*10/15/15 16:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 134*	*10/14/15 09:20*	*10/15/15 16:54*	*1*
Toluene-d8 (Surr)	*99*		*75 - 122*	*10/14/15 09:20*	*10/15/15 16:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Benzo[a]anthracene	<0.037		0.037	0.0050	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1

Client Sample ID: 2920-50-B04
Date Collected: 10/13/15 09:55
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-10
Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Benzo[b]fluoranthene	<0.037		0.037	0.0080	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.055	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Carbazole	<0.19		0.19	0.092	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
4-Chloroaniline	<0.75	*	0.75	0.17	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
2,4-Dinitrophenol	<0.75	*	0.75	0.65	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Fluoranthene	**0.0072**	**J**	0.037	0.0069	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
2-Methylnaphthalene	<0.037		0.037	0.0068	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
N-Nitrosodi-n-propylamine	<0.19		0.19	0.045	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Phenanthrene	**0.014**	**J**	0.037	0.0052	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1

Client Sample ID: 2920-50-B04
Date Collected: 10/13/15 09:55
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-10
Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.037		0.037	0.0074	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	10/14/15 15:48	10/21/15 02:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*25 - 119*	*10/14/15 15:48*	*10/21/15 02:22*	*1*
2-Fluorophenol	*84*		*25 - 110*	*10/14/15 15:48*	*10/21/15 02:22*	*1*
Nitrobenzene-d5	*77*		*25 - 115*	*10/14/15 15:48*	*10/21/15 02:22*	*1*
Phenol-d5	*78*		*31 - 110*	*10/14/15 15:48*	*10/21/15 02:22*	*1*
Terphenyl-d14	*98*		*36 - 134*	*10/14/15 15:48*	*10/21/15 02:22*	*1*
2,4,6-Tribromophenol	*69*		*35 - 137*	*10/14/15 15:48*	*10/21/15 02:22*	*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	☼	10/16/15 11:00	10/16/15 22:29	1
Arsenic	**1.8**		0.56	0.26	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Barium	**18**		0.56	0.10	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Beryllium	**0.34**		0.22	0.048	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Boron	**1.4**	**J**	2.8	0.39	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Cadmium	**0.048**	**J**	0.11	0.032	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Chromium	**8.7**	**B**	0.56	0.096	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Cobalt	**3.0**		0.28	0.063	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Copper	**5.7**	**B**	0.56	0.12	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Iron	**7500**		11	4.3	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Lead	**19**		0.28	0.14	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Magnesium	**810**		5.6	2.3	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Manganese	**130**		0.56	0.11	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Nickel	**6.3**		0.56	0.15	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Selenium	<0.56		0.56	0.28	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Silver	<0.28		0.28	0.065	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Thallium	<0.56		0.56	0.27	mg/Kg	☼	10/16/15 11:00	10/18/15 16:29	1
Vanadium	**15**		0.28	0.081	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	1
Zinc	**27**		1.1	0.35	mg/Kg	☼	10/16/15 11:00	10/16/15 22:29	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		10/21/15 10:00	10/21/15 18:23	1
Iron	**1.8**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 18:23	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		10/15/15 10:00	10/15/15 18:00	1
Barium	**0.18**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 18:00	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 18:00	1
Boron	**0.055**	**J**	0.10	0.050	mg/L		10/15/15 10:00	10/15/15 18:00	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 18:00	1
Chromium	**0.030**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:00	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:00	1
Iron	**18**		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 18:00	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B04
Date Collected: 10/13/15 09:55
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-10
Matrix: Solid
Percent Solids: 85.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.014**		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 18:00	1
Manganese	**0.082**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:00	1
Nickel	**0.018**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:00	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 18:00	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:00	1
Zinc	**0.078**	**J**	0.10	0.020	mg/L		10/15/15 10:00	10/15/15 18:00	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		10/15/15 10:00	10/16/15 12:30	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/15/15 13:15	10/16/15 09:20	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.019**		0.018	0.0062	mg/Kg	☼	10/14/15 14:30	10/15/15 10:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.13**		0.200	0.200	SU			10/16/15 11:28	1

Client Sample ID: 2920-50-B05
Date Collected: 10/13/15 09:50
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-11
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	<0.020		0.020	0.0039	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Benzene	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Bromodichloromethane	<0.0051		0.0051	0.00086	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Bromoform	<0.0051		0.0051	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
2-Butanone (MEK)	<0.0051		0.0051	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Carbon disulfide	<0.0051		0.0051	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Carbon tetrachloride	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Chlorobenzene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Chloroethane	<0.0051		0.0051	0.0021	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Chloroform	<0.0051		0.0051	0.00099	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Chloromethane	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
cis-1,2-Dichloroethene	<0.0051		0.0051	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
cis-1,3-Dichloropropene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Dibromochloromethane	<0.0051		0.0051	0.00059	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
1,1-Dichloroethane	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
1,2-Dichloroethane	<0.0051		0.0051	0.00076	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
1,1-Dichloroethene	<0.0051		0.0051	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
1,2-Dichloropropane	<0.0051		0.0051	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
1,3-Dichloropropene, Total	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Ethylbenzene	<0.0051		0.0051	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Methylene Chloride	<0.0051		0.0051	0.0039	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Methyl tert-butyl ether	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Styrene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
1,1,2,2-Tetrachloroethane	<0.0051		0.0051	0.00081	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Tetrachloroethene	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Toluene	<0.0051		0.0051	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
trans-1,2-Dichloroethene	<0.0051		0.0051	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
trans-1,3-Dichloropropene	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
1,1,1-Trichloroethane	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
1,1,2-Trichloroethane	<0.0051		0.0051	0.00099	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Trichloroethene	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Vinyl acetate	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Vinyl chloride	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1
Xylenes, Total	<0.010		0.010	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 122*	*10/14/15 09:20*	*10/15/15 17:17*	*1*
Dibromofluoromethane	*105*		*75 - 120*	*10/14/15 09:20*	*10/15/15 17:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*10/14/15 09:20*	*10/15/15 17:17*	*1*
Toluene-d8 (Surr)	*98*		*75 - 122*	*10/14/15 09:20*	*10/15/15 17:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.035		0.035	0.0063	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Anthracene	<0.035		0.035	0.0059	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Benzo[a]anthracene	<0.035		0.035	0.0047	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1

Client Sample ID: 2920-50-B05
Date Collected: 10/13/15 09:50
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-11
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	<0.035		0.035	0.0068	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Benzo[b]fluoranthene	<0.035		0.035	0.0076	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.064	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Carbazole	<0.18		0.18	0.088	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
4-Chloroaniline	<0.71	*	0.71	0.16	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Chrysene	<0.035		0.035	0.0096	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0068	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Diethyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Di-n-butyl phthalate	<0.18		0.18	0.053	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
2,4-Dinitrophenol	<0.71	*	0.71	0.62	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
2,6-Dinitrotoluene	<0.18		0.18	0.069	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Di-n-octyl phthalate	<0.18		0.18	0.057	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Fluoranthene	<0.035		0.035	0.0065	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Hexachlorobenzene	<0.071		0.071	0.0081	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Hexachlorobutadiene	<0.18		0.18	0.055	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Hexachlorocyclopentadiene	<0.71		0.71	0.20	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Hexachloroethane	<0.18		0.18	0.053	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0091	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Isophorone	<0.18		0.18	0.039	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
2-Methylnaphthalene	<0.035		0.035	0.0065	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
2-Methylphenol	<0.18		0.18	0.056	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
2-Nitroaniline	<0.18		0.18	0.047	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
4-Nitrophenol	<0.71		0.71	0.33	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.043	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
N-Nitrosodiphenylamine	<0.18		0.18	0.041	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Pentachlorophenol	<0.71		0.71	0.56	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Phenanthrene	<0.035		0.035	0.0049	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
Phenol	<0.18		0.18	0.078	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1

Client Sample ID: 2920-50-B05 **Lab Sample ID: 500-102505-11**
Date Collected: 10/13/15 09:50 **Matrix: Solid**
Date Received: 10/14/15 07:50 **Percent Solids: 89.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.035		0.035	0.0070	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
2,4,5-Trichlorophenol	<0.35		0.35	0.080	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	10/14/15 15:48	10/21/15 02:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*25 - 119*	*10/14/15 15:48*	*10/21/15 02:50*	*1*
2-Fluorophenol	*73*		*25 - 110*	*10/14/15 15:48*	*10/21/15 02:50*	*1*
Nitrobenzene-d5	*70*		*25 - 115*	*10/14/15 15:48*	*10/21/15 02:50*	*1*
Phenol-d5	*62*		*31 - 110*	*10/14/15 15:48*	*10/21/15 02:50*	*1*
Terphenyl-d14	*84*		*36 - 134*	*10/14/15 15:48*	*10/21/15 02:50*	*1*
2,4,6-Tribromophenol	*68*		*35 - 137*	*10/14/15 15:48*	*10/21/15 02:50*	*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	☼	10/16/15 11:00	10/16/15 22:36	1
Arsenic	**2.1**		0.54	0.25	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Barium	**11**		0.54	0.099	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Beryllium	**0.28**		0.22	0.047	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Boron	**0.72**	**J**	2.7	0.38	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Cadmium	<0.11		0.11	0.031	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Chromium	**7.9**	**B**	0.54	0.093	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Cobalt	**1.9**		0.27	0.061	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Copper	**3.7**	**B**	0.54	0.12	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Iron	**6500**		11	4.2	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Lead	**3.0**		0.27	0.14	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Magnesium	**520**		5.4	2.2	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Manganese	**22**		0.54	0.11	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Nickel	**4.7**		0.54	0.15	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Selenium	<0.54		0.54	0.27	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	10/16/15 11:00	10/18/15 16:33	1
Vanadium	**14**		0.27	0.079	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	1
Zinc	**13**		1.1	0.34	mg/Kg	☼	10/16/15 11:00	10/16/15 22:36	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		10/21/15 10:00	10/21/15 18:28	1
Iron	**0.82**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 18:28	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		10/15/15 10:00	10/15/15 18:07	1
Barium	**0.11**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 18:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 18:07	1
Boron	<0.10		0.10	0.050	mg/L		10/15/15 10:00	10/15/15 18:07	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 18:07	1
Chromium	**0.038**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:07	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:07	1
Iron	**31**		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 18:07	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B05
Date Collected: 10/13/15 09:50
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-11
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	**0.015**		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 18:07	1
Manganese	**0.056**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:07	1
Nickel	**0.024**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:07	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 18:07	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:07	1
Zinc	**0.069**	**J**	0.10	0.020	mg/L		10/15/15 10:00	10/15/15 18:07	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		10/15/15 10:00	10/16/15 12:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:32	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		10/15/15 13:15	10/16/15 09:22	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.012**	**J**	0.016	0.0057	mg/Kg	☼	10/14/15 14:30	10/15/15 10:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.81**		0.200	0.200	SU			10/16/15 11:36	1

Client Sample ID: 2920-50-B06
Date Collected: 10/13/15 09:45
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-12
Matrix: Solid
Percent Solids: 93.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0040	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Benzene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Bromodichloromethane	<0.0052		0.0052	0.00088	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Bromoform	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Bromomethane	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
2-Butanone (MEK)	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Carbon disulfide	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Carbon tetrachloride	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Chlorobenzene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Chloroethane	<0.0052		0.0052	0.0022	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Chloroform	<0.0052		0.0052	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Chloromethane	<0.0052		0.0052	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
cis-1,2-Dichloroethene	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
cis-1,3-Dichloropropene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Dibromochloromethane	<0.0052		0.0052	0.00060	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
1,1-Dichloroethane	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
1,2-Dichloroethane	<0.0052		0.0052	0.00077	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
1,1-Dichloroethene	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
1,2-Dichloropropane	<0.0052		0.0052	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
1,3-Dichloropropene, Total	<0.0052		0.0052	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Ethylbenzene	<0.0052		0.0052	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Methylene Chloride	<0.0052		0.0052	0.0039	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Methyl tert-butyl ether	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Styrene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
1,1,2,2-Tetrachloroethane	<0.0052		0.0052	0.00083	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Tetrachloroethene	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Toluene	<0.0052		0.0052	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
trans-1,2-Dichloroethene	<0.0052		0.0052	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
trans-1,3-Dichloropropene	<0.0052		0.0052	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
1,1,1-Trichloroethane	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
1,1,2-Trichloroethane	<0.0052		0.0052	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Trichloroethene	<0.0052		0.0052	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Vinyl acetate	<0.0052		0.0052	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Vinyl chloride	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1
Xylenes, Total	<0.010		0.010	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 122*	*10/14/15 09:20*	*10/15/15 17:41*	*1*
Dibromofluoromethane	*103*		*75 - 120*	*10/14/15 09:20*	*10/15/15 17:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*10/14/15 09:20*	*10/15/15 17:41*	*1*
Toluene-d8 (Surr)	*97*		*75 - 122*	*10/14/15 09:20*	*10/15/15 17:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.035		0.035	0.0063	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Anthracene	<0.035		0.035	0.0059	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Benzo[a]anthracene	<0.035		0.035	0.0047	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1

Client Sample ID: 2920-50-B06
Date Collected: 10/13/15 09:45
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-12
Matrix: Solid
Percent Solids: 93.1

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	0.0068	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Benzo[b]fluoranthene	<0.035		0.035	0.0076	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.064	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Butyl benzyl phthalate	<0.18		0.18	0.067	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Carbazole	<0.18		0.18	0.088	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
4-Chloroaniline	<0.71	*	0.71	0.16	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
2-Chlorophenol	<0.18		0.18	0.060	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Chrysene	<0.035		0.035	0.0096	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0068	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Diethyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Di-n-butyl phthalate	<0.18		0.18	0.053	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
4,6-Dinitro-2-methylphenol	<0.71		0.71	0.28	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
2,4-Dinitrophenol	<0.71		0.71	0.62	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
2,4-Dinitrotoluene	<0.18		0.18	0.056	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
2,6-Dinitrotoluene	<0.18		0.18	0.069	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Di-n-octyl phthalate	<0.18		0.18	0.057	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Fluoranthene	<0.035		0.035	0.0065	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Hexachlorobenzene	<0.071		0.071	0.0081	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Hexachlorobutadiene	<0.18		0.18	0.055	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Hexachlorocyclopentadiene	<0.71		0.71	0.20	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Hexachloroethane	<0.18		0.18	0.053	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0091	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Isophorone	<0.18		0.18	0.039	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
2-Methylnaphthalene	<0.035		0.035	0.0065	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
2-Methylphenol	<0.18		0.18	0.056	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
2-Nitroaniline	<0.18		0.18	0.047	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Nitrobenzene	<0.035		0.035	0.0088	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
4-Nitrophenol	<0.71		0.71	0.33	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.043	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
N-Nitrosodiphenylamine	<0.18		0.18	0.041	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Pentachlorophenol	<0.71		0.71	0.56	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Phenanthrene	<0.035		0.035	0.0049	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
Phenol	<0.18		0.18	0.078	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1

Client Sample ID: 2920-50-B06 **Lab Sample ID: 500-102505-12**
Date Collected: 10/13/15 09:45 **Matrix: Solid**
Date Received: 10/14/15 07:50 **Percent Solids: 93.1**

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	☼	10/14/15 08:23	10/16/15 21:51	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
2,4,5-Trichlorophenol	<0.35		0.35	0.080	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	10/14/15 08:23	10/16/15 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*25 - 119*	*10/14/15 08:23*	*10/16/15 21:51*	*1*
2-Fluorophenol	*94*		*25 - 110*	*10/14/15 08:23*	*10/16/15 21:51*	*1*
Nitrobenzene-d5	*88*		*25 - 115*	*10/14/15 08:23*	*10/16/15 21:51*	*1*
Phenol-d5	*91*		*31 - 110*	*10/14/15 08:23*	*10/16/15 21:51*	*1*
Terphenyl-d14	*103*		*36 - 134*	*10/14/15 08:23*	*10/16/15 21:51*	*1*
2,4,6-Tribromophenol	*97*		*35 - 137*	*10/14/15 08:23*	*10/16/15 21:51*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Arsenic	**2.1**		0.53	0.24	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Barium	**18**		0.53	0.097	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Beryllium	**0.23**		0.21	0.046	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Boron	**0.58**	**J**	2.6	0.37	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Cadmium	<0.11		0.11	0.031	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Chromium	**5.4**	**B**	0.53	0.091	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Cobalt	**1.5**		0.26	0.060	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Copper	**2.9**	**B**	0.53	0.11	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Iron	**5400**		11	4.1	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Lead	**3.6**		0.26	0.13	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Magnesium	**490**		5.3	2.2	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Manganese	**37**		0.53	0.10	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Nickel	**4.1**		0.53	0.14	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Selenium	<0.53		0.53	0.26	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Silver	<0.26		0.26	0.062	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	10/16/15 11:00	10/18/15 16:37	1
Vanadium	**10**		0.26	0.077	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	1
Zinc	**14**		1.1	0.34	mg/Kg	☼	10/16/15 11:00	10/16/15 22:43	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		10/21/15 10:00	10/21/15 18:33	1
Iron	**1.3**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 18:33	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		10/15/15 10:00	10/15/15 18:14	1
Barium	**0.13**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 18:14	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 18:14	1
Boron	**0.051**	**J**	0.10	0.050	mg/L		10/15/15 10:00	10/15/15 18:14	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 18:14	1
Chromium	**0.037**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:14	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:14	1
Iron	**30**		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 18:14	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B06
Date Collected: 10/13/15 09:45
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-12
Matrix: Solid
Percent Solids: 93.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.020**		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 18:14	1
Manganese	**0.097**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:14	1
Nickel	**0.024**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:14	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 18:14	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:14	1
Zinc	**0.10**		0.10	0.020	mg/L		10/15/15 10:00	10/15/15 18:14	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		10/15/15 10:00	10/16/15 12:35	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:35	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		10/15/15 13:15	10/16/15 09:24	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.018	0.0062	mg/Kg	☼	10/14/15 14:30	10/15/15 10:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.74**		0.200	0.200	SU			10/16/15 11:43	1

Client Sample ID: 2920-50-B07
Date Collected: 10/13/15 09:35
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-13
Matrix: Solid
Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0040	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Benzene	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Bromodichloromethane	<0.0051		0.0051	0.00087	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Bromoform	<0.0051		0.0051	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
2-Butanone (MEK)	<0.0051		0.0051	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Carbon disulfide	<0.0051		0.0051	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Carbon tetrachloride	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Chlorobenzene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Chloroethane	<0.0051		0.0051	0.0022	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Chloroform	<0.0051		0.0051	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Chloromethane	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
cis-1,2-Dichloroethene	<0.0051		0.0051	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
cis-1,3-Dichloropropene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Dibromochloromethane	<0.0051		0.0051	0.00059	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
1,1-Dichloroethane	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
1,2-Dichloroethane	<0.0051		0.0051	0.00076	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
1,1-Dichloroethene	<0.0051		0.0051	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
1,2-Dichloropropane	<0.0051		0.0051	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
1,3-Dichloropropene, Total	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Ethylbenzene	<0.0051		0.0051	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Methylene Chloride	<0.0051		0.0051	0.0039	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Methyl tert-butyl ether	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Styrene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
1,1,2,2-Tetrachloroethane	<0.0051		0.0051	0.00082	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Tetrachloroethene	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Toluene	<0.0051		0.0051	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
trans-1,2-Dichloroethene	<0.0051		0.0051	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
trans-1,3-Dichloropropene	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
1,1,1-Trichloroethane	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
1,1,2-Trichloroethane	<0.0051		0.0051	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Trichloroethene	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Vinyl acetate	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Vinyl chloride	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1
Xylenes, Total	<0.010		0.010	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 122*	*10/14/15 09:20*	*10/15/15 18:05*	*1*
Dibromofluoromethane	*104*		*75 - 120*	*10/14/15 09:20*	*10/15/15 18:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*10/14/15 09:20*	*10/15/15 18:05*	*1*
Toluene-d8 (Surr)	*97*		*75 - 122*	*10/14/15 09:20*	*10/15/15 18:05*	*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	☼	10/14/15 08:23	10/16/15 22:19	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Anthracene	<0.035		0.035	0.0060	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Benzo[a]anthracene	<0.035		0.035	0.0048	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B07
Date Collected: 10/13/15 09:35
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-13
Matrix: Solid
Percent Solids: 91.7

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	☼	10/14/15 08:23	10/16/15 22:19	1
Benzo[b]fluoranthene	<0.035		0.035	0.0077	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.053	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
4-Chloroaniline	<0.72	*	0.72	0.17	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Chrysene	<0.035		0.035	0.0097	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0069	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
2,4-Dichlorophenol	<0.35		0.35	0.085	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Diethyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
2,4-Dimethylphenol	<0.35		0.35	0.14	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Fluoranthene	<0.035		0.035	0.0066	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Hexachlorocyclopentadiene	<0.72		0.72	0.20	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0092	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
2-Methylnaphthalene	<0.035		0.035	0.0066	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
3 & 4 Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.044	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Phenanthrene	<0.035		0.035	0.0050	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
Phenol	<0.18		0.18	0.079	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1

Client Sample ID: 2920-50-B07 **Lab Sample ID: 500-102505-13**
Date Collected: 10/13/15 09:35 **Matrix: Solid**
Date Received: 10/14/15 07:50 **Percent Solids: 91.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.035		0.035	0.0071	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
2,4,5-Trichlorophenol	<0.35		0.35	0.081	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	10/14/15 08:23	10/16/15 22:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*25 - 119*	*10/14/15 08:23*	*10/16/15 22:19*	*1*
2-Fluorophenol	*95*		*25 - 110*	*10/14/15 08:23*	*10/16/15 22:19*	*1*
Nitrobenzene-d5	*93*		*25 - 115*	*10/14/15 08:23*	*10/16/15 22:19*	*1*
Phenol-d5	*91*		*31 - 110*	*10/14/15 08:23*	*10/16/15 22:19*	*1*
Terphenyl-d14	*103*		*36 - 134*	*10/14/15 08:23*	*10/16/15 22:19*	*1*
2,4,6-Tribromophenol	*100*		*35 - 137*	*10/14/15 08:23*	*10/16/15 22:19*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Arsenic	**1.1**		0.53	0.24	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Barium	**9.2**		0.53	0.096	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Beryllium	**0.19**	**J**	0.21	0.046	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Boron	**0.64**	**J**	2.6	0.37	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Cadmium	<0.11		0.11	0.030	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Chromium	**5.2**	**B**	0.53	0.090	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Cobalt	**1.4**		0.26	0.059	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Copper	**2.2**	**B**	0.53	0.11	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Iron	**4200**		11	4.1	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Lead	**2.6**		0.26	0.13	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Magnesium	**570**		5.3	2.1	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Manganese	**28**		0.53	0.10	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Nickel	**3.4**		0.53	0.14	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Selenium	<0.53		0.53	0.26	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Silver	<0.26		0.26	0.062	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	10/16/15 11:00	10/18/15 16:41	1
Vanadium	**7.8**		0.26	0.077	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	1
Zinc	**10**		1.1	0.33	mg/Kg	☼	10/16/15 11:00	10/16/15 22:50	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		10/21/15 10:00	10/21/15 18:38	1
Iron	**2.3**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 18:38	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		10/15/15 10:00	10/15/15 18:21	1
Barium	**0.071**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 18:21	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 18:21	1
Boron	<0.10		0.10	0.050	mg/L		10/15/15 10:00	10/15/15 18:21	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 18:21	1
Chromium	**0.025**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:21	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:21	1
Iron	**23**		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 18:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B07
Date Collected: 10/13/15 09:35
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-13
Matrix: Solid
Percent Solids: 91.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.017**		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 18:21	1
Manganese	**0.10**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:21	1
Nickel	**0.014**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:21	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 18:21	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:21	1
Zinc	**0.063**	**J**	0.10	0.020	mg/L		10/15/15 10:00	10/15/15 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		10/15/15 10:00	10/16/15 12:38	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:38	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		10/15/15 13:15	10/16/15 09:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.011**	**J**	0.017	0.0061	mg/Kg	☼	10/14/15 14:30	10/15/15 10:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.47**		0.200	0.200	SU			10/16/15 11:51	1

Client Sample ID: 2920-50-B08
Date Collected: 10/13/15 09:30
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-14
Matrix: Solid
Percent Solids: 91.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0040	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Benzene	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Bromodichloromethane	<0.0051		0.0051	0.00086	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Bromoform	<0.0051		0.0051	0.0010	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
2-Butanone (MEK)	<0.0051		0.0051	0.0018	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Carbon disulfide	<0.0051		0.0051	0.0019	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Carbon tetrachloride	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Chlorobenzene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Chloroethane	<0.0051	*	0.0051	0.0021	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Chloroform	<0.0051		0.0051	0.0010	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Chloromethane	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
cis-1,2-Dichloroethene	<0.0051		0.0051	0.0010	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
cis-1,3-Dichloropropene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Dibromochloromethane	<0.0051		0.0051	0.00059	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
1,1-Dichloroethane	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
1,2-Dichloroethane	<0.0051		0.0051	0.00076	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
1,1-Dichloroethene	<0.0051		0.0051	0.0019	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
1,2-Dichloropropane	<0.0051		0.0051	0.0013	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
1,3-Dichloropropene, Total	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Ethylbenzene	<0.0051		0.0051	0.0013	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Methylene Chloride	<0.0051		0.0051	0.0039	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Methyl tert-butyl ether	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Styrene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
1,1,2,2-Tetrachloroethane	<0.0051		0.0051	0.00081	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Tetrachloroethene	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Toluene	<0.0051		0.0051	0.0018	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
trans-1,2-Dichloroethene	<0.0051		0.0051	0.0013	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
trans-1,3-Dichloropropene	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
1,1,1-Trichloroethane	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
1,1,2-Trichloroethane	<0.0051		0.0051	0.00099	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Trichloroethene	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Vinyl acetate	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Vinyl chloride	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1
Xylenes, Total	<0.010		0.010	0.0019	mg/Kg	☼	10/14/15 09:20	10/20/15 03:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 122*	*10/14/15 09:20*	*10/20/15 03:27*	*1*
Dibromofluoromethane	*100*		*75 - 120*	*10/14/15 09:20*	*10/20/15 03:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*70 - 134*	*10/14/15 09:20*	*10/20/15 03:27*	*1*
Toluene-d8 (Surr)	*90*		*75 - 122*	*10/14/15 09:20*	*10/20/15 03:27*	*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	☼	10/14/15 08:23	10/16/15 22:46	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Benzo[a]anthracene	<0.036		0.036	0.0049	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B08
Date Collected: 10/13/15 09:30
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-14
Matrix: Solid
Percent Solids: 91.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Benzo[b]fluoranthene	<0.036		0.036	0.0078	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Butyl benzyl phthalate	<0.18		0.18	0.069	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
4-Chloroaniline	<0.73	*	0.73	0.17	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
2-Chlorophenol	<0.18		0.18	0.062	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Chrysene	<0.036		0.036	0.0099	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0070	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
2,4-Dichlorophenol	<0.36		0.36	0.086	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
4,6-Dinitro-2-methylphenol	<0.73		0.73	0.29	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
2,4-Dinitrophenol	<0.73		0.73	0.64	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Fluoranthene	<0.036		0.036	0.0067	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Hexachlorobenzene	<0.073		0.073	0.0084	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Hexachlorobutadiene	<0.18		0.18	0.057	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Hexachlorocyclopentadiene	<0.73		0.73	0.21	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0094	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
2-Methylnaphthalene	<0.036		0.036	0.0066	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
4-Nitrophenol	<0.73		0.73	0.34	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.044	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Pentachlorophenol	<0.73		0.73	0.58	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Phenanthrene	<0.036		0.036	0.0050	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1

Client Sample ID: 2920-50-B08 **Lab Sample ID: 500-102505-14**
Date Collected: 10/13/15 09:30 **Matrix: Solid**
Date Received: 10/14/15 07:50 **Percent Solids: 91.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.036		0.036	0.0072	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	10/14/15 08:23	10/16/15 22:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*99*		*25 - 119*	*10/14/15 08:23*	*10/16/15 22:46*	*1*
2-Fluorophenol	*100*		*25 - 110*	*10/14/15 08:23*	*10/16/15 22:46*	*1*
Nitrobenzene-d5	*98*		*25 - 115*	*10/14/15 08:23*	*10/16/15 22:46*	*1*
Phenol-d5	*96*		*31 - 110*	*10/14/15 08:23*	*10/16/15 22:46*	*1*
Terphenyl-d14	*108*		*36 - 134*	*10/14/15 08:23*	*10/16/15 22:46*	*1*
2,4,6-Tribromophenol	*107*		*35 - 137*	*10/14/15 08:23*	*10/16/15 22:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.21	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Arsenic	**0.90**		0.50	0.23	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Barium	**9.8**		0.50	0.092	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Beryllium	**0.17**	**J**	0.20	0.044	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Boron	**0.69**	**J**	2.5	0.35	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Cadmium	<0.10		0.10	0.029	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Chromium	**4.5**	**B**	0.50	0.087	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Cobalt	**2.3**		0.25	0.057	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Copper	**2.5**	**B**	0.50	0.11	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Iron	**3300**		10	3.9	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Lead	**2.9**		0.25	0.13	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Magnesium	**460**		5.0	2.0	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Manganese	**110**		0.50	0.10	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Nickel	**4.0**		0.50	0.14	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Selenium	<0.50		0.50	0.25	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Silver	<0.25		0.25	0.059	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Thallium	<0.50		0.50	0.25	mg/Kg	☼	10/16/15 11:00	10/18/15 16:45	1
Vanadium	**5.9**		0.25	0.074	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1
Zinc	**14**		1.0	0.32	mg/Kg	☼	10/16/15 11:00	10/16/15 22:57	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.51**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 18:43	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/21/15 10:00	10/21/15 18:43	1
Manganese	**0.042**		0.025	0.010	mg/L		10/21/15 10:00	10/21/15 18:43	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		10/15/15 10:00	10/15/15 18:45	1
Barium	**0.061**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 18:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 18:45	1
Boron	<0.10		0.10	0.050	mg/L		10/15/15 10:00	10/15/15 18:45	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 18:45	1
Chromium	**0.023**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:45	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:45	1

Client Sample ID: 2920-50-B08
Date Collected: 10/13/15 09:30
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-14
Matrix: Solid
Percent Solids: 91.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**12**		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 18:45	1
Lead	**0.0086**		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 18:45	1
Manganese	**0.23**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:45	1
Nickel	**0.014**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:45	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 18:45	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:45	1
Zinc	**0.055**	**J**	0.10	0.020	mg/L		10/15/15 10:00	10/15/15 18:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/15/15 10:00	10/16/15 12:40	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:40	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		10/15/15 13:15	10/16/15 09:28	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.012**	**J**	0.016	0.0057	mg/Kg	☼	10/14/15 14:30	10/15/15 10:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.03**		0.200	0.200	SU			10/16/15 11:59	1

Client Sample ID: 2920-50-B09
Date Collected: 10/13/15 09:25
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-15
Matrix: Solid
Percent Solids: 91.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0038	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Benzene	<0.0049		0.0049	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Bromodichloromethane	<0.0049		0.0049	0.00083	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Bromoform	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Bromomethane	<0.0049		0.0049	0.0018	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
2-Butanone (MEK)	<0.0049		0.0049	0.0017	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Carbon disulfide	<0.0049		0.0049	0.0018	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Carbon tetrachloride	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Chlorobenzene	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Chloroethane	<0.0049	*	0.0049	0.0021	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Chloroform	<0.0049		0.0049	0.00096	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Chloromethane	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
cis-1,2-Dichloroethene	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
cis-1,3-Dichloropropene	<0.0049		0.0049	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Dibromochloromethane	<0.0049		0.0049	0.00056	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
1,1-Dichloroethane	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
1,2-Dichloroethane	<0.0049		0.0049	0.00073	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
1,1-Dichloroethene	<0.0049		0.0049	0.0018	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
1,2-Dichloropropane	<0.0049		0.0049	0.0013	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
1,3-Dichloropropene, Total	<0.0049		0.0049	0.0014	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Ethylbenzene	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Methylene Chloride	<0.0049		0.0049	0.0037	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Methyl tert-butyl ether	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Styrene	<0.0049		0.0049	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
1,1,2,2-Tetrachloroethane	<0.0049		0.0049	0.00078	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Tetrachloroethene	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Toluene	<0.0049		0.0049	0.0017	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
trans-1,2-Dichloroethene	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
trans-1,3-Dichloropropene	<0.0049		0.0049	0.0014	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
1,1,1-Trichloroethane	<0.0049		0.0049	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
1,1,2-Trichloroethane	<0.0049		0.0049	0.00095	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Trichloroethene	<0.0049		0.0049	0.0013	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Vinyl acetate	<0.0049		0.0049	0.0013	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Vinyl chloride	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1
Xylenes, Total	<0.0098		0.0098	0.0018	mg/Kg	☼	10/14/15 09:20	10/16/15 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 122*	*10/14/15 09:20*	*10/16/15 15:13*	*1*
Dibromofluoromethane	*108*		*75 - 120*	*10/14/15 09:20*	*10/16/15 15:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*10/14/15 09:20*	*10/16/15 15:13*	*1*
Toluene-d8 (Surr)	*97*		*75 - 122*	*10/14/15 09:20*	*10/16/15 15:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.035		0.035	0.0063	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Anthracene	<0.035		0.035	0.0058	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Benzo[a]anthracene	<0.035		0.035	0.0047	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B09
Date Collected: 10/13/15 09:25
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-15
Matrix: Solid
Percent Solids: 91.6

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	0.0067	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Benzo[b]fluoranthene	<0.035		0.035	0.0075	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.052	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.064	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Butyl benzyl phthalate	<0.18		0.18	0.066	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Carbazole	<0.18		0.18	0.087	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
4-Chloroaniline	<0.70	*	0.70	0.16	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
2-Chlorophenol	<0.18		0.18	0.059	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Chrysene	<0.035		0.035	0.0095	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0067	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Dibenzofuran	<0.18		0.18	0.041	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
1,2-Dichlorobenzene	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
1,4-Dichlorobenzene	<0.18		0.18	0.045	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.049	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Diethyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Dimethyl phthalate	<0.18		0.18	0.046	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Di-n-butyl phthalate	<0.18		0.18	0.053	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
2,4-Dinitrotoluene	<0.18		0.18	0.055	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
2,6-Dinitrotoluene	<0.18		0.18	0.069	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Di-n-octyl phthalate	<0.18		0.18	0.057	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Fluoranthene	<0.035		0.035	0.0065	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Hexachlorobenzene	<0.070		0.070	0.0081	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Hexachlorobutadiene	<0.18		0.18	0.055	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Hexachloroethane	<0.18		0.18	0.053	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0090	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Isophorone	<0.18		0.18	0.039	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
2-Methylnaphthalene	<0.035		0.035	0.0064	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
2-Methylphenol	<0.18		0.18	0.056	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
3 & 4 Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Naphthalene	<0.035		0.035	0.0054	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
2-Nitroaniline	<0.18		0.18	0.047	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Nitrobenzene	<0.035		0.035	0.0087	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.043	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
N-Nitrosodiphenylamine	<0.18		0.18	0.041	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.040	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Phenanthrene	<0.035		0.035	0.0049	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
Phenol	<0.18		0.18	0.077	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1

Client Sample ID: 2920-50-B09 **Lab Sample ID: 500-102505-15**
Date Collected: 10/13/15 09:25 **Matrix: Solid**
Date Received: 10/14/15 07:50 **Percent Solids: 91.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.035		0.035	0.0069	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
2,4,5-Trichlorophenol	<0.35		0.35	0.080	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	10/14/15 08:23	10/16/15 23:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*25 - 119*	*10/14/15 08:23*	*10/16/15 23:15*	*1*
2-Fluorophenol	*99*		*25 - 110*	*10/14/15 08:23*	*10/16/15 23:15*	*1*
Nitrobenzene-d5	*96*		*25 - 115*	*10/14/15 08:23*	*10/16/15 23:15*	*1*
Phenol-d5	*96*		*31 - 110*	*10/14/15 08:23*	*10/16/15 23:15*	*1*
Terphenyl-d14	*110*		*36 - 134*	*10/14/15 08:23*	*10/16/15 23:15*	*1*
2,4,6-Tribromophenol	*102*		*35 - 137*	*10/14/15 08:23*	*10/16/15 23:15*	*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	☼	10/16/15 11:00	10/16/15 23:19	1
Arsenic	**1.9**		0.54	0.25	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Barium	**7.5**		0.54	0.10	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Beryllium	**0.21**	**J**	0.22	0.047	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Boron	**0.80**	**J**	2.7	0.38	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Cadmium	<0.11		0.11	0.031	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Chromium	**5.0**	**B**	0.54	0.094	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Cobalt	**1.9**		0.27	0.061	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Copper	**3.5**	**B**	0.54	0.12	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Iron	**5000**		11	4.2	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Lead	**3.1**		0.27	0.14	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Magnesium	**500**		5.4	2.2	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Manganese	**57**		0.54	0.11	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Nickel	**4.0**		0.54	0.15	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Selenium	<0.54		0.54	0.27	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Silver	<0.27		0.27	0.064	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	10/16/15 11:00	10/18/15 16:49	1
Vanadium	**10**		0.27	0.079	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1
Zinc	**12**		1.1	0.34	mg/Kg	☼	10/16/15 11:00	10/16/15 23:19	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.7**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 18:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/21/15 10:00	10/21/15 18:48	1
Manganese	**0.043**		0.025	0.010	mg/L		10/21/15 10:00	10/21/15 18:48	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		10/15/15 10:00	10/15/15 18:52	1
Barium	**0.056**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 18:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 18:52	1
Boron	**0.063**	**J**	0.10	0.050	mg/L		10/15/15 10:00	10/15/15 18:52	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 18:52	1
Chromium	**0.023**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:52	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:52	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B09
Date Collected: 10/13/15 09:25
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-15
Matrix: Solid
Percent Solids: 91.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	22		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 18:52	1
Lead	0.014		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 18:52	1
Manganese	0.19		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:52	1
Nickel	0.017	J	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:52	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 18:52	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:52	1
Zinc	0.062	J	0.10	0.020	mg/L		10/15/15 10:00	10/15/15 18:52	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		10/15/15 10:00	10/16/15 12:43	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:43	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		10/15/15 13:15	10/16/15 09:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.016	0.0055	mg/Kg	☼	10/14/15 14:30	10/15/15 10:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.05		0.200	0.200	SU			10/16/15 12:07	1

Client Sample ID: 2920-50-B10
Date Collected: 10/13/15 09:15
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-16
Matrix: Solid
Percent Solids: 92.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0041	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Benzene	<0.0053		0.0053	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Bromodichloromethane	<0.0053		0.0053	0.00089	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Bromoform	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Bromomethane	<0.0053		0.0053	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
2-Butanone (MEK)	<0.0053		0.0053	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Carbon disulfide	<0.0053		0.0053	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Carbon tetrachloride	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Chlorobenzene	<0.0053		0.0053	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Chloroethane	<0.0053		0.0053	0.0022	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Chloroform	<0.0053		0.0053	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Chloromethane	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
cis-1,2-Dichloroethene	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
cis-1,3-Dichloropropene	<0.0053		0.0053	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Dibromochloromethane	<0.0053		0.0053	0.00061	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
1,1-Dichloroethane	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
1,2-Dichloroethane	<0.0053		0.0053	0.00078	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
1,1-Dichloroethene	<0.0053		0.0053	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
1,2-Dichloropropane	<0.0053		0.0053	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
1,3-Dichloropropene, Total	<0.0053		0.0053	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Ethylbenzene	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
2-Hexanone	<0.0053		0.0053	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Methylene Chloride	<0.0053		0.0053	0.0040	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
4-Methyl-2-pentanone (MIBK)	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Methyl tert-butyl ether	<0.0053		0.0053	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Styrene	<0.0053		0.0053	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
1,1,2,2-Tetrachloroethane	<0.0053		0.0053	0.00084	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Tetrachloroethene	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Toluene	<0.0053		0.0053	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
trans-1,2-Dichloroethene	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
trans-1,3-Dichloropropene	<0.0053		0.0053	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
1,1,1-Trichloroethane	<0.0053		0.0053	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
1,1,2-Trichloroethane	<0.0053		0.0053	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Trichloroethene	<0.0053		0.0053	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Vinyl acetate	<0.0053		0.0053	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Vinyl chloride	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1
Xylenes, Total	<0.011		0.011	0.0020	mg/Kg	☼	10/14/15 09:20	10/15/15 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 122*	*10/14/15 09:20*	*10/15/15 19:17*	*1*
Dibromofluoromethane	*103*		*75 - 120*	*10/14/15 09:20*	*10/15/15 19:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*10/14/15 09:20*	*10/15/15 19:17*	*1*
Toluene-d8 (Surr)	*96*		*75 - 122*	*10/14/15 09:20*	*10/15/15 19:17*	*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	☼	10/14/15 08:23	10/16/15 23:43	1
Acenaphthylene	<0.036		0.036	0.0047	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Anthracene	<0.036		0.036	0.0060	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Benzo[a]anthracene	<0.036		0.036	0.0048	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B10
Date Collected: 10/13/15 09:15
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-16
Matrix: Solid
Percent Solids: 92.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.036		0.036	0.0070	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Benzo[b]fluoranthene	<0.036		0.036	0.0078	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Benzo[g,h,i]perylene	<0.036		0.036	0.012	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Benzo[k]fluoranthene	<0.036		0.036	0.011	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.066	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Carbazole	<0.18		0.18	0.090	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
4-Chloroaniline	<0.72	*	0.72	0.17	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
2-Chloronaphthalene	<0.18		0.18	0.040	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Chrysene	<0.036		0.036	0.0098	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Dibenz(a,h)anthracene	<0.036		0.036	0.0069	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
2,4-Dichlorophenol	<0.36		0.36	0.085	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Di-n-butyl phthalate	<0.18		0.18	0.055	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
2,6-Dinitrotoluene	<0.18		0.18	0.071	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Di-n-octyl phthalate	<0.18		0.18	0.059	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Fluoranthene	<0.036		0.036	0.0067	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Fluorene	<0.036		0.036	0.0051	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Hexachloroethane	<0.18		0.18	0.055	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Indeno[1,2,3-cd]pyrene	<0.036		0.036	0.0093	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
2-Methylnaphthalene	<0.036		0.036	0.0066	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
2-Methylphenol	<0.18		0.18	0.058	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Naphthalene	<0.036		0.036	0.0055	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Nitrobenzene	<0.036		0.036	0.0090	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.044	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Pentachlorophenol	<0.72		0.72	0.58	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Phenanthrene	<0.036		0.036	0.0050	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
Phenol	<0.18		0.18	0.080	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1

Client Sample ID: 2920-50-B10
Date Collected: 10/13/15 09:15
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-16
Matrix: Solid
Percent Solids: 92.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.036		0.036	0.0071	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.039	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
2,4,5-Trichlorophenol	<0.36		0.36	0.082	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1
2,4,6-Trichlorophenol	<0.36		0.36	0.12	mg/Kg	☼	10/14/15 08:23	10/16/15 23:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*25 - 119*	*10/14/15 08:23*	*10/16/15 23:43*	*1*
2-Fluorophenol	*100*		*25 - 110*	*10/14/15 08:23*	*10/16/15 23:43*	*1*
Nitrobenzene-d5	*96*		*25 - 115*	*10/14/15 08:23*	*10/16/15 23:43*	*1*
Phenol-d5	*96*		*31 - 110*	*10/14/15 08:23*	*10/16/15 23:43*	*1*
Terphenyl-d14	*110*		*36 - 134*	*10/14/15 08:23*	*10/16/15 23:43*	*1*
2,4,6-Tribromophenol	*112*		*35 - 137*	*10/14/15 08:23*	*10/16/15 23:43*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.21	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Arsenic	**1.5**		0.52	0.24	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Barium	**13**		0.52	0.095	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Beryllium	**0.18**	**J**	0.21	0.045	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Boron	**0.50**	**J**	2.6	0.36	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Cadmium	<0.10		0.10	0.030	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Chromium	**4.1**	**B**	0.52	0.089	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Cobalt	**1.1**		0.26	0.058	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Copper	**2.5**	**B**	0.52	0.11	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Iron	**3900**		10	4.0	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Lead	**3.1**		0.26	0.13	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Magnesium	**400**		5.2	2.1	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Manganese	**48**		0.52	0.10	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Nickel	**2.9**		0.52	0.14	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Selenium	<0.52		0.52	0.26	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Silver	<0.26		0.26	0.061	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Thallium	<0.52		0.52	0.25	mg/Kg	☼	10/16/15 11:00	10/18/15 16:53	1
Vanadium	**7.1**		0.26	0.076	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	1
Zinc	**11**		1.0	0.33	mg/Kg	☼	10/16/15 11:00	10/16/15 23:26	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		10/21/15 10:00	10/21/15 19:02	1
Iron	**2.0**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 19:02	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		10/15/15 10:00	10/15/15 18:59	1
Barium	**0.070**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 18:59	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 18:59	1
Boron	<0.10		0.10	0.050	mg/L		10/15/15 10:00	10/15/15 18:59	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 18:59	1
Chromium	**0.016**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:59	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:59	1
Iron	**12**		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 18:59	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B10
Date Collected: 10/13/15 09:15
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-16
Matrix: Solid
Percent Solids: 92.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.0079**		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 18:59	1
Manganese	**0.12**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:59	1
Nickel	**0.010**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:59	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 18:59	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 18:59	1
Zinc	**0.054**	**J**	0.10	0.020	mg/L		10/15/15 10:00	10/15/15 18:59	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		10/15/15 10:00	10/16/15 12:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:46	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		10/15/15 13:15	10/16/15 09:36	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.012**	**J**	0.017	0.0059	mg/Kg	☼	10/14/15 14:30	10/15/15 10:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.56**		0.200	0.200	SU			10/16/15 12:15	1

Client Sample ID: 2920-50-B10 DUP
Date Collected: 10/13/15 09:20
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-17
Matrix: Solid
Percent Solids: 93.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0040	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Benzene	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Bromodichloromethane	<0.0052		0.0052	0.00087	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Bromoform	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Bromomethane	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
2-Butanone (MEK)	<0.0052		0.0052	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Carbon disulfide	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Carbon tetrachloride	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Chlorobenzene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Chloroethane	<0.0052		0.0052	0.0022	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Chloroform	<0.0052		0.0052	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Chloromethane	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
cis-1,2-Dichloroethene	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
cis-1,3-Dichloropropene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Dibromochloromethane	<0.0052		0.0052	0.00059	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
1,1-Dichloroethane	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
1,2-Dichloroethane	<0.0052		0.0052	0.00077	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
1,1-Dichloroethene	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
1,2-Dichloropropane	<0.0052		0.0052	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
1,3-Dichloropropene, Total	<0.0052		0.0052	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Ethylbenzene	<0.0052		0.0052	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Methylene Chloride	<0.0052		0.0052	0.0039	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Methyl tert-butyl ether	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Styrene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
1,1,2,2-Tetrachloroethane	<0.0052		0.0052	0.00082	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Tetrachloroethene	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Toluene	<0.0052		0.0052	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
trans-1,2-Dichloroethene	<0.0052		0.0052	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
trans-1,3-Dichloropropene	<0.0052		0.0052	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
1,1,1-Trichloroethane	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
1,1,2-Trichloroethane	<0.0052		0.0052	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Trichloroethene	<0.0052		0.0052	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Vinyl acetate	<0.0052		0.0052	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Vinyl chloride	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1
Xylenes, Total	<0.010		0.010	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 122*	*10/14/15 09:20*	*10/15/15 19:41*	*1*
Dibromofluoromethane	*101*		*75 - 120*	*10/14/15 09:20*	*10/15/15 19:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 134*	*10/14/15 09:20*	*10/15/15 19:41*	*1*
Toluene-d8 (Surr)	*100*		*75 - 122*	*10/14/15 09:20*	*10/15/15 19:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.035		0.035	0.0062	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Acenaphthylene	<0.035		0.035	0.0046	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Anthracene	<0.035		0.035	0.0058	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Benzo[a]anthracene	<0.035		0.035	0.0047	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B10 DUP
Date Collected: 10/13/15 09:20
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-17
Matrix: Solid
Percent Solids: 93.1

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	0.0067	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Benzo[b]fluoranthene	<0.035		0.035	0.0075	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Benzo[g,h,i]perylene	<0.035		0.035	0.011	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Benzo[k]fluoranthene	<0.035		0.035	0.010	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.052	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.064	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Butyl benzyl phthalate	<0.17		0.17	0.066	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Carbazole	<0.17		0.17	0.087	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
4-Chloroaniline	<0.70	*	0.70	0.16	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
2-Chlorophenol	<0.17		0.17	0.059	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Chrysene	<0.035		0.035	0.0095	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0067	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Dibenzofuran	<0.17		0.17	0.041	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
1,2-Dichlorobenzene	<0.17		0.17	0.042	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
1,4-Dichlorobenzene	<0.17		0.17	0.045	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.049	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
2,4-Dichlorophenol	<0.35		0.35	0.083	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Diethyl phthalate	<0.17		0.17	0.059	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
2,4-Dimethylphenol	<0.35		0.35	0.13	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Di-n-butyl phthalate	<0.17		0.17	0.053	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
4,6-Dinitro-2-methylphenol	<0.70		0.70	0.28	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
2,4-Dinitrophenol	<0.70		0.70	0.61	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
2,4-Dinitrotoluene	<0.17		0.17	0.055	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
2,6-Dinitrotoluene	<0.17		0.17	0.068	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Di-n-octyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Fluoranthene	<0.035		0.035	0.0064	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Fluorene	<0.035		0.035	0.0049	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Hexachlorobenzene	<0.070		0.070	0.0081	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Hexachlorobutadiene	<0.17		0.17	0.055	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Hexachlorocyclopentadiene	<0.70		0.70	0.20	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Hexachloroethane	<0.17		0.17	0.053	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0090	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Isophorone	<0.17		0.17	0.039	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
2-Methylnaphthalene	<0.035		0.035	0.0064	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
2-Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
3 & 4 Methylphenol	<0.17		0.17	0.058	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Naphthalene	<0.035		0.035	0.0053	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
2-Nitroaniline	<0.17		0.17	0.047	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Nitrobenzene	<0.035		0.035	0.0087	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
4-Nitrophenol	<0.70		0.70	0.33	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
N-Nitrosodi-n-propylamine	<0.17		0.17	0.042	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
N-Nitrosodiphenylamine	<0.17		0.17	0.041	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Pentachlorophenol	<0.70		0.70	0.56	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Phenanthrene	<0.035		0.035	0.0048	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
Phenol	<0.17		0.17	0.077	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1

Client Sample ID: 2920-50-B10 DUP **Lab Sample ID: 500-102505-17**
Date Collected: 10/13/15 09:20 **Matrix: Solid**
Date Received: 10/14/15 07:50 **Percent Solids: 93.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.035		0.035	0.0069	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
2,4,5-Trichlorophenol	<0.35		0.35	0.079	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	10/14/15 08:23	10/17/15 00:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*25 - 119*	*10/14/15 08:23*	*10/17/15 00:11*	*1*
2-Fluorophenol	*100*		*25 - 110*	*10/14/15 08:23*	*10/17/15 00:11*	*1*
Nitrobenzene-d5	*99*		*25 - 115*	*10/14/15 08:23*	*10/17/15 00:11*	*1*
Phenol-d5	*98*		*31 - 110*	*10/14/15 08:23*	*10/17/15 00:11*	*1*
Terphenyl-d14	*111*		*36 - 134*	*10/14/15 08:23*	*10/17/15 00:11*	*1*
2,4,6-Tribromophenol	*110*		*35 - 137*	*10/14/15 08:23*	*10/17/15 00:11*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.21	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Arsenic	**1.7**		0.52	0.24	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Barium	**11**		0.52	0.095	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Beryllium	**0.21**		0.21	0.045	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Boron	**0.59**	**J**	2.6	0.36	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Cadmium	<0.10		0.10	0.030	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Chromium	**4.8**	**B**	0.52	0.089	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Cobalt	**1.4**		0.26	0.058	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Copper	**2.8**	**B**	0.52	0.11	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Iron	**4500**		10	4.0	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Lead	**2.9**		0.26	0.13	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Magnesium	**450**		5.2	2.1	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Manganese	**34**		0.52	0.10	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Nickel	**3.4**		0.52	0.14	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Selenium	<0.52		0.52	0.26	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Thallium	<0.52		0.52	0.25	mg/Kg	☼	10/16/15 11:00	10/18/15 16:57	1
Vanadium	**8.7**		0.26	0.075	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	1
Zinc	**11**		1.0	0.33	mg/Kg	☼	10/16/15 11:00	10/16/15 23:33	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		10/21/15 10:00	10/21/15 19:07	1
Iron	**2.3**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 19:07	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		10/15/15 10:00	10/15/15 19:06	1
Barium	**0.078**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 19:06	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 19:06	1
Boron	<0.10		0.10	0.050	mg/L		10/15/15 10:00	10/15/15 19:06	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 19:06	1
Chromium	**0.024**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 19:06	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 19:06	1
Iron	**25**		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 19:06	1

Client Sample ID: 2920-50-B10 DUP
Date Collected: 10/13/15 09:20
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-17
Matrix: Solid
Percent Solids: 93.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.013**		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 19:06	1
Manganese	**0.094**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 19:06	1
Nickel	**0.016**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 19:06	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 19:06	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 19:06	1
Zinc	**0.53**		0.10	0.020	mg/L		10/15/15 10:00	10/15/15 19:06	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		10/15/15 10:00	10/16/15 12:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:48	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		10/15/15 13:15	10/16/15 09:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.016**	**J**	0.017	0.0059	mg/Kg	☼	10/14/15 14:30	10/15/15 10:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**6.58**		0.200	0.200	SU			10/16/15 12:22	1

Client Sample ID: 2920-50-B11
Date Collected: 10/13/15 09:10
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-18
Matrix: Solid
Percent Solids: 93.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0040	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Benzene	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Bromodichloromethane	<0.0052		0.0052	0.00087	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Bromoform	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Bromomethane	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
2-Butanone (MEK)	<0.0052		0.0052	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Carbon disulfide	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Carbon tetrachloride	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Chlorobenzene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Chloroethane	<0.0052		0.0052	0.0022	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Chloroform	<0.0052		0.0052	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Chloromethane	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
cis-1,2-Dichloroethene	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
cis-1,3-Dichloropropene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Dibromochloromethane	<0.0052		0.0052	0.00059	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
1,1-Dichloroethane	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
1,2-Dichloroethane	<0.0052		0.0052	0.00077	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
1,1-Dichloroethene	<0.0052		0.0052	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
1,2-Dichloropropane	<0.0052		0.0052	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
1,3-Dichloropropene, Total	<0.0052		0.0052	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Ethylbenzene	<0.0052		0.0052	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
2-Hexanone	<0.0052		0.0052	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Methylene Chloride	<0.0052		0.0052	0.0039	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
4-Methyl-2-pentanone (MIBK)	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Methyl tert-butyl ether	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Styrene	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
1,1,2,2-Tetrachloroethane	<0.0052		0.0052	0.00082	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Tetrachloroethene	<0.0052		0.0052	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Toluene	<0.0052		0.0052	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
trans-1,2-Dichloroethene	<0.0052		0.0052	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
trans-1,3-Dichloropropene	<0.0052		0.0052	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
1,1,1-Trichloroethane	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
1,1,2-Trichloroethane	<0.0052		0.0052	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Trichloroethene	<0.0052		0.0052	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Vinyl acetate	<0.0052		0.0052	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Vinyl chloride	<0.0052		0.0052	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1
Xylenes, Total	<0.010		0.010	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 122*	*10/14/15 09:20*	*10/15/15 20:05*	*1*
Dibromofluoromethane	*104*		*75 - 120*	*10/14/15 09:20*	*10/15/15 20:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*10/14/15 09:20*	*10/15/15 20:05*	*1*
Toluene-d8 (Surr)	*97*		*75 - 122*	*10/14/15 09:20*	*10/15/15 20:05*	*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	☼	10/14/15 08:23	10/17/15 00:39	1
Acenaphthylene	<0.035		0.035	0.0047	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Anthracene	<0.035		0.035	0.0060	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Benzo[a]anthracene	<0.035		0.035	0.0048	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1

Client Sample ID: 2920-50-B11
Date Collected: 10/13/15 09:10
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Lab Sample ID: 500-102505-18
Matrix: Solid
Percent Solids: 93.0

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	☼	10/14/15 08:23	10/17/15 00:39	1
Benzo[b]fluoranthene	<0.035		0.035	0.0077	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Benzo[g,h,i]perylene	<0.035		0.035	0.012	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Benzo[k]fluoranthene	<0.035		0.035	0.011	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.054	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.065	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Butyl benzyl phthalate	<0.18		0.18	0.068	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Carbazole	<0.18		0.18	0.089	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
4-Chloroaniline	<0.72	*	0.72	0.17	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
2-Chloronaphthalene	<0.18		0.18	0.039	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
2-Chlorophenol	<0.18		0.18	0.061	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Chrysene	<0.035		0.035	0.0097	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Dibenz(a,h)anthracene	<0.035		0.035	0.0069	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Dibenzofuran	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
1,2-Dichlorobenzene	<0.18		0.18	0.043	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
1,4-Dichlorobenzene	<0.18		0.18	0.046	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.050	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
2,4-Dichlorophenol	<0.35		0.35	0.085	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Diethyl phthalate	<0.18		0.18	0.061	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
2,4-Dimethylphenol	<0.35		0.35	0.14	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Dimethyl phthalate	<0.18		0.18	0.047	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Di-n-butyl phthalate	<0.18		0.18	0.054	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
4,6-Dinitro-2-methylphenol	<0.72		0.72	0.29	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
2,4-Dinitrophenol	<0.72		0.72	0.63	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
2,4-Dinitrotoluene	<0.18		0.18	0.057	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
2,6-Dinitrotoluene	<0.18		0.18	0.070	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Di-n-octyl phthalate	<0.18		0.18	0.058	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Fluoranthene	<0.035		0.035	0.0066	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Fluorene	<0.035		0.035	0.0050	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Hexachlorobenzene	<0.072		0.072	0.0083	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Hexachlorobutadiene	<0.18		0.18	0.056	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Hexachlorocyclopentadiene	<0.72		0.72	0.21	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Hexachloroethane	<0.18		0.18	0.054	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Indeno[1,2,3-cd]pyrene	<0.035		0.035	0.0093	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Isophorone	<0.18		0.18	0.040	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
2-Methylnaphthalene	<0.035		0.035	0.0066	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
2-Methylphenol	<0.18		0.18	0.057	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
3 & 4 Methylphenol	<0.18		0.18	0.060	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Naphthalene	<0.035		0.035	0.0055	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
2-Nitroaniline	<0.18		0.18	0.048	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
4-Nitroaniline	<0.35		0.35	0.15	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Nitrobenzene	<0.035		0.035	0.0089	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
4-Nitrophenol	<0.72		0.72	0.34	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.044	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
N-Nitrosodiphenylamine	<0.18		0.18	0.042	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.041	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Pentachlorophenol	<0.72		0.72	0.57	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Phenanthrene	<0.035		0.035	0.0050	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
Phenol	<0.18		0.18	0.079	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1

Client Sample ID: 2920-50-B11
Date Collected: 10/13/15 09:10
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-18
Matrix: Solid
Percent Solids: 93.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.035		0.035	0.0071	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.038	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
2,4,5-Trichlorophenol	<0.35		0.35	0.082	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1
2,4,6-Trichlorophenol	<0.35		0.35	0.12	mg/Kg	☼	10/14/15 08:23	10/17/15 00:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*105*		*25 - 119*	*10/14/15 08:23*	*10/17/15 00:39*	*1*
2-Fluorophenol	*103*		*25 - 110*	*10/14/15 08:23*	*10/17/15 00:39*	*1*
Nitrobenzene-d5	*100*		*25 - 115*	*10/14/15 08:23*	*10/17/15 00:39*	*1*
Phenol-d5	*99*		*31 - 110*	*10/14/15 08:23*	*10/17/15 00:39*	*1*
Terphenyl-d14	*115*		*36 - 134*	*10/14/15 08:23*	*10/17/15 00:39*	*1*
2,4,6-Tribromophenol	*106*		*35 - 137*	*10/14/15 08:23*	*10/17/15 00:39*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Arsenic	**2.2**		0.53	0.24	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Barium	**7.9**		0.53	0.096	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Beryllium	**0.20**	**J**	0.21	0.045	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Boron	**0.55**	**J**	2.6	0.37	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Cadmium	<0.11		0.11	0.030	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Chromium	**5.1**	**B**	0.53	0.090	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Cobalt	**1.4**		0.26	0.059	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Copper	**2.1**	**B**	0.53	0.11	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Iron	**5700**		11	4.0	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Lead	**2.2**		0.26	0.13	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Magnesium	**430**		5.3	2.1	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Manganese	**32**		0.53	0.10	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Nickel	**3.3**		0.53	0.14	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Selenium	<0.53		0.53	0.26	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Silver	<0.26		0.26	0.061	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Thallium	<0.53		0.53	0.26	mg/Kg	☼	10/16/15 11:00	10/18/15 17:01	1
Vanadium	**9.8**		0.26	0.077	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1
Zinc	**8.5**		1.1	0.33	mg/Kg	☼	10/16/15 11:00	10/16/15 23:39	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.015**		0.0075	0.0075	mg/L		10/21/15 10:00	10/21/15 19:12	1
Iron	**21**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 19:12	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		10/15/15 10:00	10/15/15 19:13	1
Barium	<0.50		0.50	0.050	mg/L		10/15/15 10:00	10/15/15 19:13	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 19:13	1
Boron	<0.10		0.10	0.050	mg/L		10/15/15 10:00	10/15/15 19:13	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 19:13	1
Chromium	**0.018**	**J**	0.025	0.010	mg/L		10/15/15 10:00	10/15/15 19:13	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 19:13	1
Iron	**18**		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 19:13	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B11
Date Collected: 10/13/15 09:10
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-18
Matrix: Solid
Percent Solids: 93.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.011**		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 19:13	1
Manganese	**0.073**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 19:13	1
Nickel	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 19:13	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 19:13	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 19:13	1
Zinc	**0.031**	**J**	0.10	0.020	mg/L		10/15/15 10:00	10/15/15 19:13	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		10/15/15 10:00	10/16/15 12:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:51	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		10/15/15 13:15	10/16/15 09:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0090**	**J**	0.016	0.0055	mg/Kg	☼	10/14/15 14:30	10/15/15 10:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.05**		0.200	0.200	SU			10/16/15 12:30	1

Client Sample ID: 2920-50-B12
Date Collected: 10/13/15 09:05
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-19
Matrix: Solid
Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.021		0.021	0.0041	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Benzene	<0.0053		0.0053	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Bromodichloromethane	<0.0053		0.0053	0.00089	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Bromoform	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Bromomethane	<0.0053		0.0053	0.0020	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
2-Butanone (MEK)	<0.0053		0.0053	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Carbon disulfide	<0.0053		0.0053	0.0020	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Carbon tetrachloride	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Chlorobenzene	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Chloroethane	<0.0053		0.0053	0.0022	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Chloroform	<0.0053		0.0053	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Chloromethane	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
cis-1,2-Dichloroethene	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
cis-1,3-Dichloropropene	<0.0053		0.0053	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Dibromochloromethane	<0.0053		0.0053	0.00061	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
1,1-Dichloroethane	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
1,2-Dichloroethane	<0.0053		0.0053	0.00079	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
1,1-Dichloroethene	<0.0053		0.0053	0.0019	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
1,2-Dichloropropane	<0.0053		0.0053	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
1,3-Dichloropropene, Total	<0.0053		0.0053	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Ethylbenzene	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
2-Hexanone	<0.0053		0.0053	0.0016	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Methylene Chloride	<0.0053		0.0053	0.0040	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
4-Methyl-2-pentanone (MIBK)	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Methyl tert-butyl ether	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Styrene	<0.0053		0.0053	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
1,1,2,2-Tetrachloroethane	<0.0053		0.0053	0.00084	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Tetrachloroethene	<0.0053		0.0053	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Toluene	<0.0053		0.0053	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
trans-1,2-Dichloroethene	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
trans-1,3-Dichloropropene	<0.0053		0.0053	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
1,1,1-Trichloroethane	<0.0053		0.0053	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
1,1,2-Trichloroethane	<0.0053		0.0053	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Trichloroethene	<0.0053		0.0053	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Vinyl acetate	<0.0053		0.0053	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Vinyl chloride	<0.0053		0.0053	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1
Xylenes, Total	<0.011		0.011	0.0020	mg/Kg	☼	10/14/15 09:20	10/15/15 20:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 122*	*10/14/15 09:20*	*10/15/15 20:29*	*1*
Dibromofluoromethane	*105*		*75 - 120*	*10/14/15 09:20*	*10/15/15 20:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*70 - 134*	*10/14/15 09:20*	*10/15/15 20:29*	*1*
Toluene-d8 (Surr)	*97*		*75 - 122*	*10/14/15 09:20*	*10/15/15 20:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.037		0.037	0.0067	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Anthracene	<0.037		0.037	0.0062	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Benzo[a]anthracene	**0.0066**	**J**	0.037	0.0050	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1

Client Sample ID: 2920-50-B12
Date Collected: 10/13/15 09:05
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-19
Matrix: Solid
Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.037		0.037	0.0072	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Benzo[b]fluoranthene	**0.0097**	**J**	0.037	0.0080	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.056	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.068	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Butyl benzyl phthalate	<0.19		0.19	0.070	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Carbazole	<0.19		0.19	0.093	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
4-Chloroaniline	<0.75	*	0.75	0.17	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
2-Chloronaphthalene	<0.19		0.19	0.041	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
2-Chlorophenol	<0.19		0.19	0.063	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Chrysene	**0.011**	**J**	0.037	0.010	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0072	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Dibenzofuran	<0.19		0.19	0.043	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
1,2-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
1,4-Dichlorobenzene	<0.19		0.19	0.047	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.052	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
2,4-Dichlorophenol	<0.37		0.37	0.088	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Diethyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Dimethyl phthalate	<0.19		0.19	0.048	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Di-n-butyl phthalate	<0.19		0.19	0.056	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
4,6-Dinitro-2-methylphenol	<0.75		0.75	0.30	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
2,4-Dinitrophenol	<0.75		0.75	0.65	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
2,4-Dinitrotoluene	<0.19		0.19	0.059	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
2,6-Dinitrotoluene	<0.19		0.19	0.073	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Di-n-octyl phthalate	<0.19		0.19	0.060	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Fluoranthene	**0.013**	**J**	0.037	0.0069	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Hexachlorobenzene	<0.075		0.075	0.0086	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Hexachlorobutadiene	<0.19		0.19	0.058	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Hexachlorocyclopentadiene	<0.75		0.75	0.21	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Hexachloroethane	<0.19		0.19	0.056	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0096	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
2-Methylnaphthalene	<0.037		0.037	0.0068	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
2-Methylphenol	<0.19		0.19	0.059	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
3 & 4 Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Naphthalene	<0.037		0.037	0.0057	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
2-Nitroaniline	<0.19		0.19	0.050	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
4-Nitrophenol	<0.75		0.75	0.35	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
N-Nitrosodi-n-propylamine	<0.19		0.19	0.045	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
N-Nitrosodiphenylamine	<0.19		0.19	0.044	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.043	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Pentachlorophenol	<0.75		0.75	0.59	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Phenanthrene	**0.032**	**J**	0.037	0.0052	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
Phenol	<0.19		0.19	0.082	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1

Client Sample ID: 2920-50-B12 **Lab Sample ID: 500-102505-19**
Date Collected: 10/13/15 09:05 **Matrix: Solid**
Date Received: 10/14/15 07:50 **Percent Solids: 88.3**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	**0.012**	**J**	0.037	0.0074	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.040	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	10/14/15 08:23	10/17/15 01:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*99*		*25 - 119*	*10/14/15 08:23*	*10/17/15 01:07*	*1*
2-Fluorophenol	*99*		*25 - 110*	*10/14/15 08:23*	*10/17/15 01:07*	*1*
Nitrobenzene-d5	*97*		*25 - 115*	*10/14/15 08:23*	*10/17/15 01:07*	*1*
Phenol-d5	*97*		*31 - 110*	*10/14/15 08:23*	*10/17/15 01:07*	*1*
Terphenyl-d14	*111*		*36 - 134*	*10/14/15 08:23*	*10/17/15 01:07*	*1*
2,4,6-Tribromophenol	*96*		*35 - 137*	*10/14/15 08:23*	*10/17/15 01:07*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.22	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Arsenic	**1.7**		0.54	0.25	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Barium	**15**		0.54	0.099	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Beryllium	**0.27**		0.22	0.047	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Boron	**1.6**	**J**	2.7	0.38	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Cadmium	**0.042**	**J**	0.11	0.031	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Chromium	**6.0**	**B**	0.54	0.093	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Cobalt	**1.5**		0.27	0.061	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Copper	**2.6**	**B**	0.54	0.12	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Iron	**5200**		11	4.2	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Lead	**7.0**		0.27	0.13	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Magnesium	**1200**		5.4	2.2	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Manganese	**45**		0.54	0.11	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Nickel	**4.0**		0.54	0.15	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Selenium	<0.54		0.54	0.27	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Silver	<0.27		0.27	0.063	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Thallium	<0.54		0.54	0.27	mg/Kg	☼	10/16/15 11:00	10/18/15 17:14	1
Vanadium	**11**		0.27	0.079	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1
Zinc	**27**		1.1	0.34	mg/Kg	☼	10/16/15 11:00	10/16/15 23:46	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.35**		0.20	0.20	mg/L		10/21/15 10:00	10/21/15 19:17	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/21/15 10:00	10/21/15 19:17	1
Manganese	**0.26**		0.025	0.010	mg/L		10/21/15 10:00	10/21/15 19:17	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		10/15/15 10:00	10/15/15 19:20	1
Barium	**0.18**	**J**	0.50	0.050	mg/L		10/15/15 10:00	10/15/15 19:20	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:00	10/15/15 19:20	1
Boron	**0.063**	**J**	0.10	0.050	mg/L		10/15/15 10:00	10/15/15 19:20	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:00	10/15/15 19:20	1
Chromium	**0.057**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 19:20	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 19:20	1

Client Sample ID: 2920-50-B12
Date Collected: 10/13/15 09:05
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-19
Matrix: Solid
Percent Solids: 88.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**41**		0.20	0.20	mg/L		10/15/15 10:00	10/15/15 19:20	1
Lead	**0.040**		0.0075	0.0075	mg/L		10/15/15 10:00	10/15/15 19:20	1
Manganese	**0.20**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 19:20	1
Nickel	**0.035**		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 19:20	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:00	10/15/15 19:20	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:00	10/15/15 19:20	1
Zinc	**0.21**		0.10	0.020	mg/L		10/15/15 10:00	10/15/15 19:20	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		10/15/15 10:00	10/16/15 12:54	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:00	10/16/15 12:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.00020	mg/L		10/15/15 13:15	10/16/15 09:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**		0.017	0.0061	mg/Kg	☼	10/14/15 14:30	10/15/15 10:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.05**		0.200	0.200	SU			10/16/15 12:38	1

Client Sample ID: 2920-50-B14
Date Collected: 10/13/15 08:45
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-21
Matrix: Solid
Percent Solids: 95.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0038	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Benzene	<0.0050		0.0050	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Bromodichloromethane	<0.0050		0.0050	0.00084	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Bromoform	<0.0050		0.0050	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Bromomethane	<0.0050		0.0050	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
2-Butanone (MEK)	<0.0050		0.0050	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Carbon disulfide	<0.0050		0.0050	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Carbon tetrachloride	<0.0050		0.0050	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Chlorobenzene	<0.0050		0.0050	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Chloroethane	<0.0050		0.0050	0.0021	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Chloroform	<0.0050		0.0050	0.00097	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Chloromethane	<0.0050		0.0050	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
cis-1,2-Dichloroethene	<0.0050		0.0050	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
cis-1,3-Dichloropropene	<0.0050		0.0050	0.0011	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Dibromochloromethane	<0.0050		0.0050	0.00057	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
1,1-Dichloroethane	<0.0050		0.0050	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
1,2-Dichloroethane	<0.0050		0.0050	0.00074	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
1,1-Dichloroethene	<0.0050		0.0050	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
1,2-Dichloropropane	<0.0050		0.0050	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
1,3-Dichloropropene, Total	<0.0050		0.0050	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Ethylbenzene	<0.0050		0.0050	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
2-Hexanone	<0.0050		0.0050	0.0015	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Methylene Chloride	<0.0050		0.0050	0.0038	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Methyl tert-butyl ether	<0.0050		0.0050	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Styrene	<0.0050		0.0050	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
1,1,2,2-Tetrachloroethane	<0.0050		0.0050	0.00079	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Tetrachloroethene	<0.0050		0.0050	0.0010	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Toluene	<0.0050		0.0050	0.0017	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
trans-1,2-Dichloroethene	<0.0050		0.0050	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
trans-1,3-Dichloropropene	<0.0050		0.0050	0.0014	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
1,1,1-Trichloroethane	<0.0050		0.0050	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
1,1,2-Trichloroethane	<0.0050		0.0050	0.00096	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Trichloroethene	<0.0050		0.0050	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Vinyl acetate	<0.0050		0.0050	0.0013	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Vinyl chloride	<0.0050		0.0050	0.0012	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1
Xylenes, Total	<0.0099		0.0099	0.0018	mg/Kg	☼	10/14/15 09:20	10/15/15 21:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 122*	*10/14/15 09:20*	*10/15/15 21:17*	*1*
Dibromofluoromethane	*101*		*75 - 120*	*10/14/15 09:20*	*10/15/15 21:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*70 - 134*	*10/14/15 09:20*	*10/15/15 21:17*	*1*
Toluene-d8 (Surr)	*98*		*75 - 122*	*10/14/15 09:20*	*10/15/15 21:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.032		0.032	0.0059	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Acenaphthylene	<0.032		0.032	0.0043	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Anthracene	<0.032		0.032	0.0055	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Benzo[a]anthracene	<0.032		0.032	0.0044	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1

Client Sample ID: 2920-50-B14
Date Collected: 10/13/15 08:45
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-21
Matrix: Solid
Percent Solids: 95.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.032		0.032	0.0063	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Benzo[b]fluoranthene	<0.032		0.032	0.0070	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Benzo[g,h,i]perylene	<0.032		0.032	0.011	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Benzo[k]fluoranthene	<0.032		0.032	0.0096	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Bis(2-chloroethyl)ether	<0.16		0.16	0.049	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Bis(2-ethylhexyl) phthalate	<0.16		0.16	0.060	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Butyl benzyl phthalate	<0.16		0.16	0.062	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Carbazole	<0.16		0.16	0.082	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
4-Chloroaniline	<0.66	*	0.66	0.15	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
2-Chloronaphthalene	<0.16		0.16	0.036	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
2-Chlorophenol	<0.16		0.16	0.056	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Chrysene	<0.032		0.032	0.0089	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Dibenz(a,h)anthracene	<0.032		0.032	0.0063	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Dibenzofuran	<0.16		0.16	0.038	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
1,2-Dichlorobenzene	<0.16		0.16	0.039	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
1,4-Dichlorobenzene	<0.16		0.16	0.042	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
3,3'-Dichlorobenzidine	<0.16		0.16	0.046	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
2,4-Dichlorophenol	<0.32		0.32	0.077	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Diethyl phthalate	<0.16		0.16	0.055	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
2,4-Dimethylphenol	<0.32		0.32	0.12	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Dimethyl phthalate	<0.16		0.16	0.043	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Di-n-butyl phthalate	<0.16		0.16	0.050	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
4,6-Dinitro-2-methylphenol	<0.66		0.66	0.26	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
2,4-Dinitrophenol	<0.66		0.66	0.57	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
2,4-Dinitrotoluene	<0.16		0.16	0.052	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
2,6-Dinitrotoluene	<0.16		0.16	0.064	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Di-n-octyl phthalate	<0.16		0.16	0.053	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Fluoranthene	<0.032		0.032	0.0060	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Fluorene	<0.032		0.032	0.0046	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Hexachlorobenzene	<0.066		0.066	0.0076	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Hexachlorobutadiene	<0.16		0.16	0.051	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Hexachlorocyclopentadiene	<0.66		0.66	0.19	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Hexachloroethane	<0.16		0.16	0.050	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Indeno[1,2,3-cd]pyrene	<0.032		0.032	0.0085	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Isophorone	<0.16		0.16	0.037	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
2-Methylnaphthalene	<0.032		0.032	0.0060	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
2-Methylphenol	<0.16		0.16	0.052	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
3 & 4 Methylphenol	<0.16		0.16	0.054	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Naphthalene	<0.032		0.032	0.0050	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
2-Nitroaniline	<0.16		0.16	0.044	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
4-Nitroaniline	<0.32		0.32	0.14	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Nitrobenzene	<0.032		0.032	0.0081	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
4-Nitrophenol	<0.66		0.66	0.31	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
N-Nitrosodi-n-propylamine	<0.16		0.16	0.040	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
N-Nitrosodiphenylamine	<0.16		0.16	0.038	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
2,2'-oxybis[1-chloropropane]	<0.16		0.16	0.038	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Pentachlorophenol	<0.66		0.66	0.52	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Phenanthrene	<0.032		0.032	0.0045	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
Phenol	<0.16		0.16	0.072	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1

Client Sample ID: 2920-50-B14
Date Collected: 10/13/15 08:45
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-21
Matrix: Solid
Percent Solids: 95.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.032		0.032	0.0065	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
1,2,4-Trichlorobenzene	<0.16		0.16	0.035	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
2,4,5-Trichlorophenol	<0.32		0.32	0.074	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1
2,4,6-Trichlorophenol	<0.32		0.32	0.11	mg/Kg	☼	10/14/15 08:23	10/17/15 01:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*94*		*25 - 119*	*10/14/15 08:23*	*10/17/15 01:35*	*1*
2-Fluorophenol	*91*		*25 - 110*	*10/14/15 08:23*	*10/17/15 01:35*	*1*
Nitrobenzene-d5	*92*		*25 - 115*	*10/14/15 08:23*	*10/17/15 01:35*	*1*
Phenol-d5	*90*		*31 - 110*	*10/14/15 08:23*	*10/17/15 01:35*	*1*
Terphenyl-d14	*109*		*36 - 134*	*10/14/15 08:23*	*10/17/15 01:35*	*1*
2,4,6-Tribromophenol	*36*		*35 - 137*	*10/14/15 08:23*	*10/17/15 01:35*	*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	☼	10/16/15 11:00	10/17/15 00:00	1
Arsenic	**1.9**		0.52	0.24	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Barium	**4.7**		0.52	0.095	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Beryllium	**0.16**	**J**	0.21	0.045	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Boron	**0.61**	**J**	2.6	0.36	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Cadmium	<0.10		0.10	0.030	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Chromium	**3.9**	**B**	0.52	0.089	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Cobalt	**1.8**		0.26	0.059	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Copper	**3.0**	**B**	0.52	0.11	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Iron	**4100**		10	4.0	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Lead	**1.9**		0.26	0.13	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Magnesium	**510**		5.2	2.1	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Manganese	**69**		0.52	0.10	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Nickel	**3.7**		0.52	0.14	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Selenium	<0.52		0.52	0.26	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Silver	<0.26		0.26	0.061	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Thallium	<0.52		0.52	0.26	mg/Kg	☼	10/16/15 11:00	10/18/15 17:22	1
Vanadium	**8.4**		0.26	0.076	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	1
Zinc	**12**		1.0	0.33	mg/Kg	☼	10/16/15 11:00	10/17/15 00:00	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		10/20/15 11:00	10/20/15 17:51	1
Iron	<0.20		0.20	0.20	mg/L		10/20/15 11:00	10/20/15 17:51	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		10/15/15 10:30	10/15/15 20:28	1
Barium	<0.50		0.50	0.050	mg/L		10/15/15 10:30	10/15/15 20:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:30	10/15/15 20:28	1
Boron	**0.051**	**J**	0.10	0.050	mg/L		10/15/15 10:30	10/15/15 20:28	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:30	10/15/15 20:28	1
Chromium	<0.025		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:28	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:28	1
Iron	**5.7**		0.20	0.20	mg/L		10/15/15 10:30	10/15/15 20:28	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B14
Date Collected: 10/13/15 08:45
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-21
Matrix: Solid
Percent Solids: 95.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		10/15/15 10:30	10/15/15 20:28	1
Manganese	**0.19**		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:28	1
Nickel	<0.025		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:28	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:30	10/15/15 20:28	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:28	1
Zinc	**0.055**	**J**	0.10	0.020	mg/L		10/15/15 10:30	10/15/15 20:28	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		10/15/15 10:30	10/19/15 13:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:30	10/19/15 13:02	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		10/15/15 13:15	10/16/15 09:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0091**	**J**	0.017	0.0059	mg/Kg	☼	10/14/15 14:30	10/15/15 10:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.29**		0.200	0.200	SU			10/16/15 13:02	1

Client Sample ID: 2920-50-B15
Date Collected: 10/13/15 08:35
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-22
Matrix: Solid
Percent Solids: 94.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0038	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Benzene	<0.0049		0.0049	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Bromodichloromethane	<0.0049		0.0049	0.00083	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Bromoform	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Bromomethane	<0.0049		0.0049	0.0018	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
2-Butanone (MEK)	<0.0049		0.0049	0.0017	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Carbon disulfide	<0.0049		0.0049	0.0018	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Carbon tetrachloride	<0.0049		0.0049	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Chlorobenzene	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Chloroethane	<0.0049	*	0.0049	0.0021	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Chloroform	<0.0049		0.0049	0.00096	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Chloromethane	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
cis-1,2-Dichloroethene	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
cis-1,3-Dichloropropene	<0.0049		0.0049	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Dibromochloromethane	<0.0049		0.0049	0.00056	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
1,1-Dichloroethane	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
1,2-Dichloroethane	<0.0049		0.0049	0.00073	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
1,1-Dichloroethene	<0.0049		0.0049	0.0018	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
1,2-Dichloropropane	<0.0049		0.0049	0.0013	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
1,3-Dichloropropene, Total	<0.0049		0.0049	0.0014	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Ethylbenzene	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
2-Hexanone	<0.0049		0.0049	0.0015	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Methylene Chloride	<0.0049		0.0049	0.0037	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Methyl tert-butyl ether	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Styrene	<0.0049		0.0049	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
1,1,2,2-Tetrachloroethane	<0.0049		0.0049	0.00078	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Tetrachloroethene	<0.0049		0.0049	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Toluene	<0.0049		0.0049	0.0017	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
trans-1,2-Dichloroethene	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
trans-1,3-Dichloropropene	<0.0049		0.0049	0.0014	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
1,1,1-Trichloroethane	<0.0049		0.0049	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
1,1,2-Trichloroethane	<0.0049		0.0049	0.00095	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Trichloroethene	<0.0049		0.0049	0.0013	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Vinyl acetate	<0.0049		0.0049	0.0013	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Vinyl chloride	<0.0049		0.0049	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1
Xylenes, Total	<0.0098		0.0098	0.0018	mg/Kg	☼	10/14/15 09:20	10/16/15 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*70 - 122*	*10/14/15 09:20*	*10/16/15 15:37*	*1*
Dibromofluoromethane	*107*		*75 - 120*	*10/14/15 09:20*	*10/16/15 15:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*70 - 134*	*10/14/15 09:20*	*10/16/15 15:37*	*1*
Toluene-d8 (Surr)	*95*		*75 - 122*	*10/14/15 09:20*	*10/16/15 15:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.034		0.034	0.0061	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Acenaphthylene	<0.034		0.034	0.0045	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Anthracene	<0.034		0.034	0.0057	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Benzo[a]anthracene	<0.034		0.034	0.0046	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1

Client Sample ID: 2920-50-B15
Date Collected: 10/13/15 08:35
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-22
Matrix: Solid
Percent Solids: 94.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.034		0.034	0.0066	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Benzo[b]fluoranthene	<0.034		0.034	0.0074	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Benzo[g,h,i]perylene	<0.034		0.034	0.011	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Benzo[k]fluoranthene	<0.034		0.034	0.010	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.051	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.062	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Butyl benzyl phthalate	<0.17		0.17	0.065	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Carbazole	<0.17		0.17	0.085	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
4-Chloroaniline	<0.69	*	0.69	0.16	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
2-Chloronaphthalene	<0.17		0.17	0.038	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
2-Chlorophenol	<0.17		0.17	0.058	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Chrysene	<0.034		0.034	0.0093	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Dibenz(a,h)anthracene	<0.034		0.034	0.0066	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Dibenzofuran	<0.17		0.17	0.040	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
1,2-Dichlorobenzene	<0.17		0.17	0.041	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
1,4-Dichlorobenzene	<0.17		0.17	0.044	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.048	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
2,4-Dichlorophenol	<0.34		0.34	0.081	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Diethyl phthalate	<0.17		0.17	0.058	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
2,4-Dimethylphenol	<0.34		0.34	0.13	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Dimethyl phthalate	<0.17		0.17	0.045	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Di-n-butyl phthalate	<0.17		0.17	0.052	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
4,6-Dinitro-2-methylphenol	<0.69		0.69	0.27	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
2,4-Dinitrophenol	<0.69		0.69	0.60	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
2,4-Dinitrotoluene	<0.17		0.17	0.054	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
2,6-Dinitrotoluene	<0.17		0.17	0.067	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Di-n-octyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Fluoranthene	<0.034		0.034	0.0063	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Fluorene	<0.034		0.034	0.0048	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Hexachlorobenzene	<0.069		0.069	0.0079	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Hexachlorobutadiene	<0.17		0.17	0.054	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Hexachlorocyclopentadiene	<0.69		0.69	0.20	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Hexachloroethane	<0.17		0.17	0.052	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Indeno[1,2,3-cd]pyrene	<0.034		0.034	0.0089	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Isophorone	<0.17		0.17	0.038	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
2-Methylnaphthalene	<0.034		0.034	0.0063	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
2-Methylphenol	<0.17		0.17	0.055	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
3 & 4 Methylphenol	<0.17		0.17	0.057	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Naphthalene	<0.034		0.034	0.0053	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
2-Nitroaniline	<0.17		0.17	0.046	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
4-Nitroaniline	<0.34		0.34	0.14	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Nitrobenzene	<0.034		0.034	0.0085	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
4-Nitrophenol	<0.69		0.69	0.32	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
N-Nitrosodi-n-propylamine	<0.17		0.17	0.042	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
N-Nitrosodiphenylamine	<0.17		0.17	0.040	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.040	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Pentachlorophenol	<0.69		0.69	0.55	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Phenanthrene	<0.034		0.034	0.0048	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
Phenol	<0.17		0.17	0.076	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1

Client Sample ID: 2920-50-B15
Date Collected: 10/13/15 08:35
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-22
Matrix: Solid
Percent Solids: 94.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.034		0.034	0.0068	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.037	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
2,4,5-Trichlorophenol	<0.34		0.34	0.078	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1
2,4,6-Trichlorophenol	<0.34		0.34	0.12	mg/Kg	☼	10/14/15 08:23	10/17/15 02:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*25 - 119*	*10/14/15 08:23*	*10/17/15 02:03*	*1*
2-Fluorophenol	*93*		*25 - 110*	*10/14/15 08:23*	*10/17/15 02:03*	*1*
Nitrobenzene-d5	*92*		*25 - 115*	*10/14/15 08:23*	*10/17/15 02:03*	*1*
Phenol-d5	*92*		*31 - 110*	*10/14/15 08:23*	*10/17/15 02:03*	*1*
Terphenyl-d14	*110*		*36 - 134*	*10/14/15 08:23*	*10/17/15 02:03*	*1*
2,4,6-Tribromophenol	*39*		*35 - 137*	*10/14/15 08:23*	*10/17/15 02:03*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.21	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Arsenic	**3.3**		0.51	0.24	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Barium	**8.4**		0.51	0.094	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Beryllium	**0.30**		0.21	0.045	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Boron	**0.84**	**J**	2.6	0.36	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Cadmium	<0.10		0.10	0.030	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Chromium	**6.5**	**B**	0.51	0.088	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Cobalt	**2.5**		0.26	0.058	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Copper	**4.0**	**B**	0.51	0.11	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Iron	**8100**		10	4.0	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Lead	**3.5**		0.26	0.13	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Magnesium	**560**		5.1	2.1	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Manganese	**52**		0.51	0.10	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Nickel	**5.6**		0.51	0.14	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Selenium	**0.44**	**J**	0.51	0.25	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Silver	<0.26		0.26	0.060	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Thallium	<0.51		0.51	0.25	mg/Kg	☼	10/16/15 11:00	10/18/15 17:26	1
Vanadium	**14**		0.26	0.075	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	1
Zinc	**17**		1.0	0.33	mg/Kg	☼	10/16/15 11:00	10/17/15 00:06	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		10/20/15 11:00	10/20/15 17:56	1
Iron	**0.51**		0.20	0.20	mg/L		10/20/15 11:00	10/20/15 17:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.012**	**J**	0.050	0.010	mg/L		10/15/15 10:30	10/15/15 20:35	1
Barium	**0.067**	**J**	0.50	0.050	mg/L		10/15/15 10:30	10/15/15 20:35	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:30	10/15/15 20:35	1
Boron	<0.10		0.10	0.050	mg/L		10/15/15 10:30	10/15/15 20:35	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:30	10/15/15 20:35	1
Chromium	**0.025**		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:35	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:35	1
Iron	**30**		0.20	0.20	mg/L		10/15/15 10:30	10/15/15 20:35	1

Client Sample ID: 2920-50-B15
Date Collected: 10/13/15 08:35
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-22
Matrix: Solid
Percent Solids: 94.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.014**		0.0075	0.0075	mg/L		10/15/15 10:30	10/15/15 20:35	1
Manganese	**0.11**		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:35	1
Nickel	**0.022**	**J**	0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:35	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:30	10/15/15 20:35	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:35	1
Zinc	**0.073**	**J**	0.10	0.020	mg/L		10/15/15 10:30	10/15/15 20:35	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		10/15/15 10:30	10/19/15 13:05	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:30	10/19/15 13:05	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		10/15/15 13:15	10/16/15 10:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.015**	**J**	0.017	0.0059	mg/Kg	☼	10/14/15 14:30	10/15/15 10:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.35**		0.200	0.200	SU			10/16/15 13:09	1

Client Sample ID: 2920-50-B16
Date Collected: 10/13/15 08:25
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-23
Matrix: Solid
Percent Solids: 95.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.020		0.020	0.0040	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Benzene	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Bromodichloromethane	<0.0051		0.0051	0.00086	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Bromoform	<0.0051		0.0051	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Bromomethane	<0.0051		0.0051	0.0019	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
2-Butanone (MEK)	<0.0051		0.0051	0.0018	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Carbon disulfide	<0.0051		0.0051	0.0019	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Carbon tetrachloride	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Chlorobenzene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Chloroethane	<0.0051	*	0.0051	0.0021	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Chloroform	<0.0051		0.0051	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Chloromethane	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
cis-1,2-Dichloroethene	<0.0051		0.0051	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
cis-1,3-Dichloropropene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Dibromochloromethane	<0.0051		0.0051	0.00059	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
1,1-Dichloroethane	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
1,2-Dichloroethane	<0.0051		0.0051	0.00076	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
1,1-Dichloroethene	<0.0051		0.0051	0.0019	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
1,2-Dichloropropane	<0.0051		0.0051	0.0013	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
1,3-Dichloropropene, Total	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Ethylbenzene	<0.0051		0.0051	0.0013	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
2-Hexanone	<0.0051		0.0051	0.0016	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Methylene Chloride	<0.0051		0.0051	0.0039	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Methyl tert-butyl ether	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Styrene	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
1,1,2,2-Tetrachloroethane	<0.0051		0.0051	0.00081	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Tetrachloroethene	<0.0051		0.0051	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Toluene	<0.0051		0.0051	0.0018	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
trans-1,2-Dichloroethene	<0.0051		0.0051	0.0013	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
trans-1,3-Dichloropropene	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
1,1,1-Trichloroethane	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
1,1,2-Trichloroethane	<0.0051		0.0051	0.00099	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Trichloroethene	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Vinyl acetate	<0.0051		0.0051	0.0014	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Vinyl chloride	<0.0051		0.0051	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1
Xylenes, Total	<0.010		0.010	0.0019	mg/Kg	☼	10/14/15 09:20	10/16/15 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 122*	*10/14/15 09:20*	*10/16/15 16:01*	*1*
Dibromofluoromethane	*102*		*75 - 120*	*10/14/15 09:20*	*10/16/15 16:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*70 - 134*	*10/14/15 09:20*	*10/16/15 16:01*	*1*
Toluene-d8 (Surr)	*95*		*75 - 122*	*10/14/15 09:20*	*10/16/15 16:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.033		0.033	0.0060	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Anthracene	<0.033		0.033	0.0056	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1

Client Sample ID: 2920-50-B16
Date Collected: 10/13/15 08:25
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-23
Matrix: Solid
Percent Solids: 95.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.033		0.033	0.0064	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Benzo[k]fluoranthene	<0.033		0.033	0.0098	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Butyl benzyl phthalate	<0.17		0.17	0.063	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Carbazole	<0.17		0.17	0.083	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
4-Chloroaniline	<0.67	*	0.67	0.16	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Chrysene	<0.033		0.033	0.0091	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0064	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
2,4-Dichlorophenol	<0.33		0.33	0.079	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Diethyl phthalate	<0.17		0.17	0.056	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Dimethyl phthalate	<0.17		0.17	0.044	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
4,6-Dinitro-2-methylphenol	<0.67		0.67	0.27	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
2,4-Dinitrophenol	<0.67		0.67	0.59	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
2,6-Dinitrotoluene	<0.17		0.17	0.065	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Di-n-octyl phthalate	<0.17		0.17	0.054	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Fluorene	<0.033		0.033	0.0047	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Hexachlorobenzene	<0.067		0.067	0.0077	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Hexachlorobutadiene	<0.17		0.17	0.052	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Hexachlorocyclopentadiene	<0.67		0.67	0.19	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0086	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Isophorone	<0.17		0.17	0.037	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
2-Methylnaphthalene	<0.033		0.033	0.0061	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
2-Methylphenol	<0.17		0.17	0.053	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
3 & 4 Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Naphthalene	<0.033		0.033	0.0051	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Nitrobenzene	<0.033		0.033	0.0083	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
4-Nitrophenol	<0.67		0.67	0.32	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
N-Nitrosodi-n-propylamine	<0.17		0.17	0.041	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
N-Nitrosodiphenylamine	<0.17		0.17	0.039	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Pentachlorophenol	<0.67		0.67	0.53	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Phenanthrene	<0.033		0.033	0.0046	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
Phenol	<0.17		0.17	0.074	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1

Client Sample ID: 2920-50-B16 **Lab Sample ID: 500-102505-23**
Date Collected: 10/13/15 08:25 **Matrix: Solid**
Date Received: 10/14/15 07:50 **Percent Solids: 95.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.033		0.033	0.0066	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
2,4,5-Trichlorophenol	<0.33		0.33	0.076	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1
2,4,6-Trichlorophenol	<0.33		0.33	0.11	mg/Kg	☼	10/14/15 08:23	10/17/15 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*25 - 119*	*10/14/15 08:23*	*10/17/15 02:31*	*1*
2-Fluorophenol	*93*		*25 - 110*	*10/14/15 08:23*	*10/17/15 02:31*	*1*
Nitrobenzene-d5	*90*		*25 - 115*	*10/14/15 08:23*	*10/17/15 02:31*	*1*
Phenol-d5	*90*		*31 - 110*	*10/14/15 08:23*	*10/17/15 02:31*	*1*
Terphenyl-d14	*109*		*36 - 134*	*10/14/15 08:23*	*10/17/15 02:31*	*1*
2,4,6-Tribromophenol	*33*	*X*	*35 - 137*	*10/14/15 08:23*	*10/17/15 02:31*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.0		1.0	0.21	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Arsenic	**2.1**		0.52	0.24	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Barium	**9.8**		0.52	0.095	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Beryllium	**0.16**	**J**	0.21	0.045	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Boron	**0.60**	**J**	2.6	0.36	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Cadmium	<0.10		0.10	0.030	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Chromium	**3.8**	**B**	0.52	0.089	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Cobalt	**2.0**		0.26	0.059	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Copper	**3.5**	**B**	0.52	0.11	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Iron	**4300**		10	4.0	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Lead	**2.3**		0.26	0.13	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Magnesium	**520**		5.2	2.1	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Manganese	**89**		0.52	0.10	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Nickel	**4.3**		0.52	0.14	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Selenium	<0.52		0.52	0.26	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Silver	<0.26		0.26	0.061	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Thallium	<0.52		0.52	0.25	mg/Kg	☼	10/16/15 11:00	10/18/15 17:30	1
Vanadium	**8.2**		0.26	0.076	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	1
Zinc	**13**		1.0	0.33	mg/Kg	☼	10/16/15 11:00	10/17/15 00:13	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		10/20/15 11:00	10/20/15 18:09	1
Iron	<0.20		0.20	0.20	mg/L		10/20/15 11:00	10/20/15 18:09	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		10/15/15 10:30	10/15/15 20:42	1
Barium	<0.50		0.50	0.050	mg/L		10/15/15 10:30	10/15/15 20:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:30	10/15/15 20:42	1
Boron	**0.052**	**J**	0.10	0.050	mg/L		10/15/15 10:30	10/15/15 20:42	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:30	10/15/15 20:42	1
Chromium	<0.025		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:42	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:42	1
Iron	**7.7**		0.20	0.20	mg/L		10/15/15 10:30	10/15/15 20:42	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B16
Date Collected: 10/13/15 08:25
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-23
Matrix: Solid
Percent Solids: 95.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		10/15/15 10:30	10/15/15 20:42	1
Manganese	**0.19**		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:42	1
Nickel	<0.025		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:42	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:30	10/15/15 20:42	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:42	1
Zinc	**0.16**		0.10	0.020	mg/L		10/15/15 10:30	10/15/15 20:42	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		10/15/15 10:30	10/19/15 13:07	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:30	10/19/15 13:07	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		10/15/15 13:15	10/16/15 10:07	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.013**	**J**	0.015	0.0054	mg/Kg	☼	10/14/15 14:30	10/15/15 10:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.85**		0.200	0.200	SU			10/16/15 13:17	1

Client Sample ID: 2920-50-B17
Date Collected: 10/13/15 08:15
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-24
Matrix: Solid
Percent Solids: 96.1

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	☼	10/14/15 09:20	10/16/15 16:24	1
Benzene	<0.0048		0.0048	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Bromodichloromethane	<0.0048		0.0048	0.00081	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Bromoform	<0.0048		0.0048	0.00098	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Bromomethane	<0.0048		0.0048	0.0018	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
2-Butanone (MEK)	<0.0048		0.0048	0.0017	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Carbon disulfide	<0.0048		0.0048	0.0018	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Carbon tetrachloride	<0.0048		0.0048	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Chlorobenzene	<0.0048		0.0048	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Chloroethane	<0.0048	*	0.0048	0.0020	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Chloroform	<0.0048		0.0048	0.00094	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Chloromethane	<0.0048		0.0048	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
cis-1,2-Dichloroethene	<0.0048		0.0048	0.00098	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
cis-1,3-Dichloropropene	<0.0048		0.0048	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Dibromochloromethane	<0.0048		0.0048	0.00055	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
1,1-Dichloroethane	<0.0048		0.0048	0.00099	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
1,2-Dichloroethane	<0.0048		0.0048	0.00071	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
1,1-Dichloroethene	<0.0048		0.0048	0.0018	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
1,2-Dichloropropane	<0.0048		0.0048	0.0013	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
1,3-Dichloropropene, Total	<0.0048		0.0048	0.0014	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Ethylbenzene	<0.0048		0.0048	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
2-Hexanone	<0.0048		0.0048	0.0015	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Methylene Chloride	<0.0048		0.0048	0.0036	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.00099	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Methyl tert-butyl ether	<0.0048		0.0048	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Styrene	<0.0048		0.0048	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
1,1,2,2-Tetrachloroethane	<0.0048		0.0048	0.00076	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Tetrachloroethene	<0.0048		0.0048	0.0010	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Toluene	<0.0048		0.0048	0.0017	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
trans-1,2-Dichloroethene	<0.0048		0.0048	0.0012	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
trans-1,3-Dichloropropene	<0.0048		0.0048	0.0014	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
1,1,1-Trichloroethane	<0.0048		0.0048	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
1,1,2-Trichloroethane	<0.0048		0.0048	0.00093	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Trichloroethene	<0.0048		0.0048	0.0013	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Vinyl acetate	<0.0048		0.0048	0.0013	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Vinyl chloride	<0.0048		0.0048	0.0011	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1
Xylenes, Total	<0.0096		0.0096	0.0018	mg/Kg	☼	10/14/15 09:20	10/16/15 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 122*	*10/14/15 09:20*	*10/16/15 16:24*	*1*
Dibromofluoromethane	*106*		*75 - 120*	*10/14/15 09:20*	*10/16/15 16:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*70 - 134*	*10/14/15 09:20*	*10/16/15 16:24*	*1*
Toluene-d8 (Surr)	*96*		*75 - 122*	*10/14/15 09:20*	*10/16/15 16:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<0.033		0.033	0.0060	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Acenaphthylene	<0.033		0.033	0.0044	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Anthracene	<0.033		0.033	0.0056	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Benzo[a]anthracene	<0.033		0.033	0.0045	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - IL HSR UPRR - WO 019

TestAmerica Job ID: 500-102505-2

Client Sample ID: 2920-50-B17
Date Collected: 10/13/15 08:15
Date Received: 10/14/15 07:50

Lab Sample ID: 500-102505-24
Matrix: Solid
Percent Solids: 96.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	<0.033		0.033	0.0065	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Benzo[b]fluoranthene	<0.033		0.033	0.0072	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Benzo[g,h,i]perylene	<0.033		0.033	0.011	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Benzo[k]fluoranthene	<0.033		0.033	0.0099	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Bis(2-chloroethyl)ether	<0.17		0.17	0.050	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Bis(2-ethylhexyl) phthalate	<0.17		0.17	0.061	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Butyl benzyl phthalate	<0.17		0.17	0.064	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Carbazole	<0.17		0.17	0.084	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
4-Chloroaniline	<0.68	*	0.68	0.16	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
2-Chloronaphthalene	<0.17		0.17	0.037	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
2-Chlorophenol	<0.17		0.17	0.057	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Chrysene	<0.033		0.033	0.0091	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Dibenz(a,h)anthracene	<0.033		0.033	0.0065	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Dibenzofuran	<0.17		0.17	0.039	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
1,2-Dichlorobenzene	<0.17		0.17	0.040	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
1,4-Dichlorobenzene	<0.17		0.17	0.043	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
3,3'-Dichlorobenzidine	<0.17		0.17	0.047	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
2,4-Dichlorophenol	<0.33		0.33	0.080	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Diethyl phthalate	<0.17		0.17	0.057	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
2,4-Dimethylphenol	<0.33		0.33	0.13	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Dimethyl phthalate	<0.17		0.17	0.044	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Di-n-butyl phthalate	<0.17		0.17	0.051	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
4,6-Dinitro-2-methylphenol	<0.68		0.68	0.27	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
2,4-Dinitrophenol	<0.68		0.68	0.59	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
2,4-Dinitrotoluene	<0.17		0.17	0.053	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
2,6-Dinitrotoluene	<0.17		0.17	0.066	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Di-n-octyl phthalate	<0.17		0.17	0.055	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Fluoranthene	<0.033		0.033	0.0062	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Fluorene	<0.033		0.033	0.0047	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Hexachlorobenzene	<0.068		0.068	0.0078	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Hexachlorobutadiene	<0.17		0.17	0.053	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Hexachlorocyclopentadiene	<0.68		0.68	0.19	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Hexachloroethane	<0.17		0.17	0.051	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Indeno[1,2,3-cd]pyrene	<0.033		0.033	0.0087	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Isophorone	<0.17		0.17	0.038	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
2-Methylnaphthalene	<0.033		0.033	0.0062	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
2-Methylphenol	<0.17		0.17	0.054	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
3 & 4 Methylphenol	<0.17		0.17	0.056	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Naphthalene	<0.033		0.033	0.0052	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
2-Nitroaniline	<0.17		0.17	0.045	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
4-Nitroaniline	<0.33		0.33	0.14	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Nitrobenzene	<0.033		0.033	0.0084	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
4-Nitrophenol	<0.68		0.68	0.32	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
N-Nitrosodi-n-propylamine	<0.17		0.17	0.041	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
N-Nitrosodiphenylamine	<0.17		0.17	0.040	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
2,2'-oxybis[1-chloropropane]	<0.17		0.17	0.039	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Pentachlorophenol	<0.68		0.68	0.54	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Phenanthrene	<0.033		0.033	0.0047	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
Phenol	<0.17		0.17	0.075	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1

Client Sample ID: 2920-50-B17 **Lab Sample ID: 500-102505-24**
Date Collected: 10/13/15 08:15 **Matrix: Solid**
Date Received: 10/14/15 07:50 **Percent Solids: 96.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	<0.033		0.033	0.0067	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
1,2,4-Trichlorobenzene	<0.17		0.17	0.036	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
2,4,5-Trichlorophenol	<0.33		0.33	0.077	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1
2,4,6-Trichlorophenol	<0.33		0.33	0.12	mg/Kg	☼	10/14/15 08:23	10/17/15 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*97*		*25 - 119*	*10/14/15 08:23*	*10/17/15 02:59*	*1*
2-Fluorophenol	*93*		*25 - 110*	*10/14/15 08:23*	*10/17/15 02:59*	*1*
Nitrobenzene-d5	*94*		*25 - 115*	*10/14/15 08:23*	*10/17/15 02:59*	*1*
Phenol-d5	*92*		*31 - 110*	*10/14/15 08:23*	*10/17/15 02:59*	*1*
Terphenyl-d14	*109*		*36 - 134*	*10/14/15 08:23*	*10/17/15 02:59*	*1*
2,4,6-Tribromophenol	*37*		*35 - 137*	*10/14/15 08:23*	*10/17/15 02:59*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.97		0.97	0.20	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Arsenic	**1.8**		0.48	0.22	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Barium	**12**		0.48	0.089	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Beryllium	**0.18**	**J**	0.19	0.042	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Boron	**0.62**	**J**	2.4	0.34	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Cadmium	<0.097		0.097	0.028	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Chromium	**4.1**	**B**	0.48	0.083	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Cobalt	**1.8**		0.24	0.055	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Copper	**3.3**	**B**	0.48	0.10	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Iron	**4400**		9.7	3.7	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Lead	**2.5**		0.24	0.12	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Magnesium	**540**		4.8	2.0	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Manganese	**61**		0.48	0.096	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Nickel	**4.4**		0.48	0.13	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Selenium	<0.48		0.48	0.24	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Silver	<0.24		0.24	0.057	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Thallium	<0.48		0.48	0.24	mg/Kg	☼	10/16/15 11:00	10/18/15 17:34	1
Vanadium	**7.3**		0.24	0.071	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	1
Zinc	**13**		0.97	0.31	mg/Kg	☼	10/16/15 11:00	10/17/15 00:20	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		10/20/15 11:00	10/20/15 18:15	1
Lead	<0.0075		0.0075	0.0075	mg/L		10/20/15 11:00	10/20/15 18:15	1
Manganese	**0.047**		0.025	0.010	mg/L		10/20/15 11:00	10/20/15 18:15	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		10/15/15 10:30	10/15/15 20:49	1
Barium	**0.078**	**J**	0.50	0.050	mg/L		10/15/15 10:30	10/15/15 20:49	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		10/15/15 10:30	10/15/15 20:49	1
Boron	<0.10		0.10	0.050	mg/L		10/15/15 10:30	10/15/15 20:49	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		10/15/15 10:30	10/15/15 20:49	1
Chromium	**0.015**	**J**	0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:49	1
Cobalt	<0.025		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:49	1

Client Sample ID: 2920-50-B17 **Lab Sample ID: 500-102505-24**
Date Collected: 10/13/15 08:15 **Matrix: Solid**
Date Received: 10/14/15 07:50 **Percent Solids: 96.1**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**13**		0.20	0.20	mg/L		10/15/15 10:30	10/15/15 20:49	1
Lead	**0.011**		0.0075	0.0075	mg/L		10/15/15 10:30	10/15/15 20:49	1
Manganese	**0.21**		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:49	1
Nickel	**0.015**	**J**	0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:49	1
Selenium	<0.050		0.050	0.020	mg/L		10/15/15 10:30	10/15/15 20:49	1
Silver	<0.025		0.025	0.010	mg/L		10/15/15 10:30	10/15/15 20:49	1
Zinc	**0.062**	**J**	0.10	0.020	mg/L		10/15/15 10:30	10/15/15 20:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		10/15/15 10:30	10/19/15 13:10	1
Thallium	<0.0020		0.0020	0.0020	mg/L		10/15/15 10:30	10/19/15 13:10	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		10/15/15 13:15	10/16/15 10:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.011**	**J**	0.016	0.0057	mg/Kg	☼	10/14/15 14:30	10/15/15 10:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.55**		0.200	0.200	SU			10/16/15 13:25	1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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.
B	Compound was found in the blank and sample.
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.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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: HSR Braidwood, Will Co. Project No.: AE6-019 TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ____ Other **Sampler:** S. Radulovic / C. Fegley

COC No.: 1 of 2

Lab Job No.: 500-102505

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
7	2920-50-B01	10/13/15	10:20AM	S	X	X					X	X	X	X						
8	2920-50-B02		10:10AM																	
9	2920-50-B03		10:00AM																	
10	2920-50-B04		9:55AM																	
11	2920-50-B05		9:50AM																	
12	2920-50-B06		9:45AM																	
13	2920-50-B07		9:35AM																	
14	2920-50-B08		9:30AM																	
15	2920-50-B09		9:25AM																	
16	2920-50-B10		9:15AM																	
17	2920-50-B10DUP		9:20AM																	
18	2920-50-B11		9:10AM																	

	Date/Time		Date/Time
Relinquished by:	10/13/15 3:30PM	Received by:	10/13/15 1530
Relinquished by:	10/13/15 1630	Received by:	10/14/15 0750
Relinquished by:	Date/Time	Received by:	Date/Time

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: HSR Braidwood, Will Co. Project No.: AE6-019 TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ____ Other **Sampler:** S. Radulovic / C. Fegley

COC No.: 2 of 2

Lab Job No.: 500-102505

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
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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
19	2920-50-B12	10/13/15	9:05AM	S	X	X					X	X	X	X						
20	2920-50-B13	"	8:50AM	"	"	"					"	"	"	"						
21	2920-50-B14	"	8:45AM	"	"	"					"	"	"	"						
22	2920-50-B15	"	8:35AM	"	"	"					"	"	"	"						
23	2920-50-B16	"	8:25AM	"	"	"					"	"	"	"						
24	2920-50-B17	"	8:15AM	"	"	"					"	"	"	"						

Relinquished by:	Date/Time	Received by:	Date/Time
	10/13/15 3:30PM		10/13/15 1530
	10/13/15 1630		10/14/15 0750

END OF ATTACHMENT