Illinois Environmental Protection Agency

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

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

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

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

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

I. Source Location Information

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

Project Name: FAU 3778 (Crawford Ave at 203rd Street) Office Phone Number, if available: _____

Physical Site Location (address, inclduding number and street):
20201 Crawford Ave and 3700-3900 203rd St

City: Olympia Fields State: IL Zip Code: 60461

County: Cook Township: Rich

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

Latitude: 41.52112 (Decimal Degrees) Longitude: -87.71307 (-Decimal Degrees)

Identify how the lat/long data were determined:

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

IEPA Site Number(s), if assigned: BOL: 0312885011 BOW: _____ BOA: _____

II. Owner/Operator Information for Source Site

Site Owner		Site Operator	
Name:	Illinois Department of Transportation	Name:	Illinois Department of Transportation
Street Address:	201 West Center Court	Street Address:	201 West Center Court
PO Box:		PO Box:	
City:	Schaumburg State: IL	City:	Schaumburg State: IL
Zip Code:	60196-1096 Phone: 847-705-4101	Zip Code:	60196-1096 Phone: 847-705-4101
Contact:	Sam Mead	Contact:	Sam Mead
Email, if available:	Sam.Mead@illinois.gov	Email, if available:	Sam.Mead@illinois.gov

Project Name: FAU 3778 (Crawford Ave at 203rd Street)

Latitude: 41.52112 Longitude: -87.71307

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 appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATIONS 2471-1-B01 & -B02 WERE SAMPLED ADJACENT TO SITE 2471-1. SEE TABLE 3a AND FIGURES 2 & 3 OF THE REVISED 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 JOB ID NO.: 500-72414-1 & 500-73777-1

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

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

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

Company Name: IDOT Bureau of Design and Environment

Street Address: 2300 South Dirksen Parkway

City: Springfield State: IL Zip Code: 62764

Phone: 217.785.4246

Steven Gobelman
Printed Name:

Licensed Professional Engineer or Licensed Professional Geologist Signature:

6/3/14
Date:

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

STEVEN GOBELMAN
196-000598
LICENSED PROFESSIONAL GEOLOGIST
STATE OF ILLINOIS

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
m-Xylene
o-Xylene
p-Xylene
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3´-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo (a) anthracene
Benzo (a) pyrene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Semivolatile Organic Compounds (mg/kg) (cont.)
Benzo (b) fluoranthene
Benzo (g,h,i) perylene
Benzo (k) fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo (a,h) anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno (1,2,3-cd) pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Potassium
Selenium
Silver
Sodium
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 2471-1

St. James Hospital and Health Centers

Sample ID	2471-1-B01-1	2471-1-B01-2	2471-1-B02-1	2471-1-B02-2	[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	[7] Most Stringent TACO Tier 1 Residential Objective
Sample Depth (ft)	0-5.5	5.5-11	0-5.5	5.5-11							
Sample Date	3/24/2014	3/24/2014	2/28/2014	2/28/2014							
PID	0	0	0	0							
Sample pH	7.94	7.83	8.22	8.32							
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: 500-72414-1
Client Project/Site: IDOT - Olympia Fields - WO 060

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

Attn: Mike Nelson

Authorized for release by:
3/18/2014 3:08:17 PM

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: 2471-1-B02-1
Date Collected: 02/28/14 09:50
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-1
Matrix: Solid
Percent Solids: 77.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0054		0.0054	0.0023	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Benzene	<0.0054		0.0054	0.00073	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Bromodichloromethane	<0.0054		0.0054	0.00092	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Bromoform	<0.0054		0.0054	0.0012	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Bromomethane	<0.0054		0.0054	0.0016	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
2-Butanone (MEK)	<0.0054		0.0054	0.0019	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Carbon disulfide	<0.0054		0.0054	0.00080	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Carbon tetrachloride	<0.0054		0.0054	0.00098	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Chlorobenzene	<0.0054		0.0054	0.00054	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Chloroethane	<0.0054	*	0.0054	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Chloroform	<0.0054		0.0054	0.00062	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Chloromethane	<0.0054		0.0054	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
cis-1,2-Dichloroethene	<0.0054		0.0054	0.00076	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
cis-1,3-Dichloropropene	<0.0054		0.0054	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Dibromochloromethane	<0.0054		0.0054	0.00093	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
1,1-Dichloroethane	<0.0054		0.0054	0.00085	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
1,2-Dichloroethane	<0.0054		0.0054	0.00079	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
1,1-Dichloroethene	<0.0054		0.0054	0.00087	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
1,2-Dichloropropane	<0.0054		0.0054	0.00081	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
1,3-Dichloropropene, Total	<0.0054		0.0054	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Ethylbenzene	<0.0054		0.0054	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
2-Hexanone	<0.0054		0.0054	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Methylene Chloride	<0.0054		0.0054	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Methyl tert-butyl ether	<0.0054		0.0054	0.00089	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Styrene	<0.0054	*	0.0054	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
1,1,2,2-Tetrachloroethane	<0.0054		0.0054	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Tetrachloroethene	<0.0054		0.0054	0.00082	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Toluene	<0.0054		0.0054	0.00075	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
trans-1,2-Dichloroethene	<0.0054		0.0054	0.00074	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
trans-1,3-Dichloropropene	<0.0054		0.0054	0.00096	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
1,1,1-Trichloroethane	<0.0054		0.0054	0.00080	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
1,1,2-Trichloroethane	<0.0054		0.0054	0.00073	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Trichloroethene	<0.0054		0.0054	0.00088	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Vinyl acetate	<0.0054		0.0054	0.00084	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Vinyl chloride	<0.0054		0.0054	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1
Xylenes, Total	<0.011		0.011	0.00049	mg/Kg	☼	02/28/14 14:25	03/04/14 12:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 122*	*02/28/14 14:25*	*03/04/14 12:29*	*1*
Dibromofluoromethane	*111*		*75 - 120*	*02/28/14 14:25*	*03/04/14 12:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*02/28/14 14:25*	*03/04/14 12:29*	*1*
Toluene-d8 (Surr)	*103*		*75 - 122*	*02/28/14 14:25*	*03/04/14 12:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.093	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-1

Client Sample ID: 2471-1-B02-1
Date Collected: 02/28/14 09:50
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-1
Matrix: Solid
Percent Solids: 77.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.049	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
N-Nitrosodi-n-propylamine	<0.21		0.21	0.051	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Hexachloroethane	<0.21		0.21	0.064	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
2-Chlorophenol	<0.21		0.21	0.072	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Nitrobenzene	<0.042		0.042	0.010	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
2,4-Dimethylphenol	<0.42		0.42	0.16	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Naphthalene	<0.042		0.042	0.0065	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
2,4-Dichlorophenol	<0.42		0.42	0.10	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
4-Chloroaniline	<0.85	*	0.85	0.20	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
2,4,6-Trichlorophenol	<0.42		0.42	0.14	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
2,4,5-Trichlorophenol	<0.42		0.42	0.096	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Hexachlorocyclopentadiene	<0.85		0.85	0.24	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
2-Methylnaphthalene	<0.042		0.042	0.0077	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
4-Chloro-3-methylphenol	<0.42		0.42	0.14	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
2-Nitrophenol	<0.42		0.42	0.099	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
3-Nitroaniline	<0.42		0.42	0.13	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
2,4-Dinitrophenol	<0.85		0.85	0.74	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Acenaphthylene	<0.042		0.042	0.0055	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
2,4-Dinitrotoluene	<0.21		0.21	0.067	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Acenaphthene	<0.042		0.042	0.0075	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
4-Nitrophenol	<0.85		0.85	0.40	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Fluorene	<0.042		0.042	0.0059	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
4-Nitroaniline	<0.42		0.42	0.18	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Hexachlorobenzene	<0.085		0.085	0.0097	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Pentachlorophenol	<0.85		0.85	0.67	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
N-Nitrosodiphenylamine	<0.21		0.21	0.050	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
4,6-Dinitro-2-methylphenol	<0.42		0.42	0.34	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Phenanthrene	<0.042		0.042	0.0058	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Anthracene	<0.042		0.042	0.0070	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Carbazole	<0.21	*	0.21	0.11	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Fluoranthene	<0.042		0.042	0.0078	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Pyrene	<0.042		0.042	0.0083	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Butyl benzyl phthalate	<0.21		0.21	0.080	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Benzo[a]anthracene	<0.042		0.042	0.0056	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1

Client Sample ID: 2471-1-B02-1
Date Collected: 02/28/14 09:50
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-1
Matrix: Solid
Percent Solids: 77.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.042		0.042	0.011	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.059	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.077	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Benzo[b]fluoranthene	<0.042		0.042	0.0091	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Benzo[k]fluoranthene	<0.042		0.042	0.012	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Benzo[a]pyrene	<0.042		0.042	0.0081	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Indeno[1,2,3-cd]pyrene	<0.042		0.042	0.011	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Dibenz(a,h)anthracene	<0.042		0.042	0.0081	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
Benzo[g,h,i]perylene	<0.042		0.042	0.014	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	03/06/14 06:51	03/06/14 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*62*		*25 - 110*	*03/06/14 06:51*	*03/06/14 20:43*	*1*
Phenol-d5	*74*		*31 - 110*	*03/06/14 06:51*	*03/06/14 20:43*	*1*
Nitrobenzene-d5	*74*		*25 - 115*	*03/06/14 06:51*	*03/06/14 20:43*	*1*
2-Fluorobiphenyl	*76*		*25 - 119*	*03/06/14 06:51*	*03/06/14 20:43*	*1*
2,4,6-Tribromophenol	*84*		*35 - 137*	*03/06/14 06:51*	*03/06/14 20:43*	*1*
Terphenyl-d14	*92*		*36 - 134*	*03/06/14 06:51*	*03/06/14 20:43*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.3		1.3	0.52	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Arsenic	**8.8**		0.65	0.13	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Barium	**120**		0.65	0.069	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Beryllium	**1.0**		0.26	0.052	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Boron	**5.2**		3.2	0.65	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Cadmium	**0.023**	**J**	0.13	0.016	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Calcium	**3100**	**B**	13	3.5	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Chromium	**26**		0.65	0.075	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Cobalt	**12**		0.32	0.065	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Copper	**23**		0.65	0.13	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Iron	**27000**		13	5.3	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Lead	**13**	**B**	0.32	0.097	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Magnesium	**5500**	**B**	6.5	1.3	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Manganese	**580**		0.65	0.13	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Nickel	**35**		0.65	0.13	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Potassium	**2100**		32	2.0	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Selenium	**0.70**		0.65	0.23	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Silver	<0.32		0.32	0.023	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Sodium	**110**		65	8.7	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Thallium	**0.97**		0.65	0.27	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Vanadium	**31**		0.32	0.048	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1
Zinc	**51**		1.3	0.26	mg/Kg	☼	03/05/14 09:15	03/06/14 15:27	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	<0.20		0.20	0.20	mg/L		03/17/14 06:45	03/17/14 21:06	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/17/14 06:45	03/17/14 21:06	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-1

Client Sample ID: 2471-1-B02-1
Date Collected: 02/28/14 09:50
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.18	J	0.50	0.050	mg/L		03/10/14 18:00	03/11/14 12:30	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/10/14 18:00	03/11/14 12:30	1
Boron	0.13	J B	0.15	0.050	mg/L		03/10/14 18:00	03/11/14 12:30	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/10/14 18:00	03/11/14 12:30	1
Chromium	0.045		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:30	1
Cobalt	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:30	1
Iron	38		0.20	0.20	mg/L		03/10/14 18:00	03/11/14 12:30	1
Lead	0.0097		0.0075	0.0075	mg/L		03/10/14 18:00	03/11/14 12:30	1
Manganese	0.13		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:30	1
Nickel	0.037		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:30	1
Selenium	<0.050		0.050	0.010	mg/L		03/10/14 18:00	03/11/14 12:30	1
Silver	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:30	1
Zinc	0.067	J	0.10	0.020	mg/L		03/10/14 18:00	03/11/14 12:30	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		03/10/14 18:00	03/11/14 15:41	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/10/14 18:00	03/11/14 15:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000036	J	0.00020	0.000020	mg/L		03/10/14 17:00	03/11/14 11:57	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.012	J	0.020	0.0078	mg/Kg	☼	03/03/14 15:30	03/04/14 11:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.22		0.200	0.200	SU			03/04/14 12:59	1

Client Sample ID: 2471-1-B02-2
Date Collected: 02/28/14 09:55
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-2
Matrix: Solid
Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.011		0.0047	0.0020	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Benzene	<0.0047		0.0047	0.00065	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Bromodichloromethane	<0.0047		0.0047	0.00082	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Bromoform	<0.0047		0.0047	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Bromomethane	<0.0047		0.0047	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
2-Butanone (MEK)	<0.0047		0.0047	0.0017	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Carbon disulfide	<0.0047		0.0047	0.00071	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Carbon tetrachloride	<0.0047		0.0047	0.00086	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Chlorobenzene	<0.0047		0.0047	0.00048	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Chloroethane	<0.0047	*	0.0047	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Chloroform	<0.0047		0.0047	0.00055	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Chloromethane	<0.0047		0.0047	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
cis-1,2-Dichloroethene	<0.0047		0.0047	0.00067	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
cis-1,3-Dichloropropene	<0.0047		0.0047	0.00062	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Dibromochloromethane	<0.0047		0.0047	0.00083	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
1,1-Dichloroethane	<0.0047		0.0047	0.00075	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
1,2-Dichloroethane	<0.0047		0.0047	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
1,1-Dichloroethene	<0.0047		0.0047	0.00077	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
1,2-Dichloropropane	<0.0047		0.0047	0.00072	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
1,3-Dichloropropene, Total	<0.0047		0.0047	0.00062	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Ethylbenzene	<0.0047		0.0047	0.00096	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
2-Hexanone	<0.0047		0.0047	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Methylene Chloride	<0.0047		0.0047	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0012	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Methyl tert-butyl ether	<0.0047		0.0047	0.00078	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Styrene	<0.0047	*	0.0047	0.00062	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
1,1,2,2-Tetrachloroethane	<0.0047		0.0047	0.00096	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Tetrachloroethene	<0.0047		0.0047	0.00072	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Toluene	<0.0047		0.0047	0.00066	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
trans-1,2-Dichloroethene	<0.0047		0.0047	0.00065	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
trans-1,3-Dichloropropene	<0.0047		0.0047	0.00085	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
1,1,1-Trichloroethane	<0.0047		0.0047	0.00071	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
1,1,2-Trichloroethane	<0.0047		0.0047	0.00065	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Trichloroethene	<0.0047		0.0047	0.00078	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Vinyl acetate	<0.0047		0.0047	0.00075	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Vinyl chloride	<0.0047		0.0047	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1
Xylenes, Total	<0.0095		0.0095	0.00043	mg/Kg	☼	02/28/14 14:25	03/04/14 12:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 122*	*02/28/14 14:25*	*03/04/14 12:51*	*1*
Dibromofluoromethane	*106*		*75 - 120*	*02/28/14 14:25*	*03/04/14 12:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 134*	*02/28/14 14:25*	*03/04/14 12:51*	*1*
Toluene-d8 (Surr)	*108*		*75 - 122*	*02/28/14 14:25*	*03/04/14 12:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.085	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-1

Client Sample ID: 2471-1-B02-2
Date Collected: 02/28/14 09:55
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-2
Matrix: Solid
Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
N-Nitrosodi-n-propylamine	<0.19		0.19	0.047	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Nitrobenzene	<0.038		0.038	0.0095	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
2,4-Dimethylphenol	<0.38		0.38	0.14	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
4-Chloroaniline	<0.77	*	0.77	0.18	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
2-Methylnaphthalene	<0.038		0.038	0.0070	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Acenaphthene	<0.038		0.038	0.0068	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Hexachlorobenzene	<0.077		0.077	0.0088	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
4,6-Dinitro-2-methylphenol	<0.38		0.38	0.31	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Carbazole	<0.19	*	0.19	0.098	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Benzo[a]anthracene	<0.038		0.038	0.0051	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1

Client Sample ID: 2471-1-B02-2
Date Collected: 02/28/14 09:55
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-2
Matrix: Solid
Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Benzo[b]fluoranthene	<0.038		0.038	0.0082	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	03/06/14 06:51	03/06/14 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*61*		*25 - 110*	*03/06/14 06:51*	*03/06/14 21:05*	*1*
Phenol-d5	*70*		*31 - 110*	*03/06/14 06:51*	*03/06/14 21:05*	*1*
Nitrobenzene-d5	*66*		*25 - 115*	*03/06/14 06:51*	*03/06/14 21:05*	*1*
2-Fluorobiphenyl	*68*		*25 - 119*	*03/06/14 06:51*	*03/06/14 21:05*	*1*
2,4,6-Tribromophenol	*71*		*35 - 137*	*03/06/14 06:51*	*03/06/14 21:05*	*1*
Terphenyl-d14	*89*		*36 - 134*	*03/06/14 06:51*	*03/06/14 21:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.48	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Arsenic	**4.8**		0.60	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Barium	**55**		0.60	0.064	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Beryllium	**0.56**		0.24	0.048	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Boron	**11**		3.0	0.60	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Cadmium	**0.096**	**J**	0.12	0.015	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Calcium	**46000**	**B**	12	3.2	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Chromium	**18**		0.60	0.069	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Cobalt	**9.9**		0.30	0.060	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Copper	**15**		0.60	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Iron	**17000**		12	4.9	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Lead	**7.2**	**B**	0.30	0.089	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Magnesium	**20000**	**B**	6.0	1.2	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Manganese	**300**		0.60	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Nickel	**22**		0.60	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Potassium	**3100**		30	1.8	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Selenium	<0.60		0.60	0.21	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Silver	<0.30		0.30	0.022	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Sodium	**200**		60	8.0	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Thallium	**0.28**	**J**	0.60	0.25	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Vanadium	**21**		0.30	0.044	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	1
Zinc	**34**		1.2	0.24	mg/Kg	☼	03/05/14 09:15	03/06/14 16:15	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		03/17/14 06:45	03/17/14 21:34	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/17/14 06:45	03/17/14 21:34	1
Manganese	**0.63**		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 21:34	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-1

Client Sample ID: 2471-1-B02-2
Date Collected: 02/28/14 09:55
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.12	J	0.50	0.050	mg/L		03/10/14 18:00	03/11/14 12:36	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/10/14 18:00	03/11/14 12:36	1
Boron	0.66	B	0.15	0.050	mg/L		03/10/14 18:00	03/11/14 12:36	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/10/14 18:00	03/11/14 12:36	1
Chromium	0.027		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:36	1
Cobalt	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:36	1
Iron	19		0.20	0.20	mg/L		03/10/14 18:00	03/11/14 12:36	1
Lead	0.0084		0.0075	0.0075	mg/L		03/10/14 18:00	03/11/14 12:36	1
Manganese	0.20		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:36	1
Nickel	0.022	J	0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:36	1
Selenium	<0.050		0.050	0.010	mg/L		03/10/14 18:00	03/11/14 12:36	1
Silver	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:36	1
Zinc	0.052	J	0.10	0.020	mg/L		03/10/14 18:00	03/11/14 12:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/10/14 18:00	03/11/14 15:48	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/10/14 18:00	03/11/14 15:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		03/10/14 17:00	03/11/14 12:03	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.018		0.018	0.0072	mg/Kg	☼	03/03/14 15:30	03/04/14 11:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.32		0.200	0.200	SU			03/04/14 13:04	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the 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.
F3	Duplicate RPD exceeds the control limit
F1	MS and/or MSD Recovery exceeds the control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

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
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)

500-72414 COC

ANDREWS ENGINEERING INC

CHAIN OF CUSTODY RECORD

Client	Laboratory	Project	COC
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: Olympia Fields, Cook Co. Project No.: IDOT 2013-060 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other Sampler: KAM / ZK (AEI)	COC No.: 1 of 1 Lab Job No.: 500-72414 Sample Temp: (4.3) (4.8)

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

ANALYSES

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids	Waste Characterization					Comments
1	2471-1-B02-1	2/28/14	9:50	S	X	X					X	X	X	X						0-5.5'
2	2471-1-B02-2	2/28/14	9:55	S	X	X					X	X	X	X						5.5'-11'

Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by: [signature]	2/28/14 12:44	Received by: [signature]	2/28/14 12:44
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

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: 500-73777-1
Client Project/Site: IDOT - Olympia Fields - WO 060

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

Attn: Mike Nelson

Jodie Bracken

Authorized for release by:
4/4/2014 11:00:39 AM
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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Visit us at: www.testamericainc.com

Client Sample ID: 2471-1-B01-1
Date Collected: 03/24/14 15:30
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-1
Matrix: Solid
Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0047		0.0047	0.0020	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Benzene	<0.0047		0.0047	0.00065	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Bromodichloromethane	<0.0047		0.0047	0.00081	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Bromoform	<0.0047		0.0047	0.0011	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Bromomethane	<0.0047	*	0.0047	0.0014	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
2-Butanone (MEK)	<0.0047		0.0047	0.0017	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Carbon disulfide	<0.0047		0.0047	0.00071	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Carbon tetrachloride	<0.0047		0.0047	0.00086	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Chlorobenzene	<0.0047		0.0047	0.00048	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Chloroethane	<0.0047	*	0.0047	0.0013	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Chloroform	<0.0047		0.0047	0.00054	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Chloromethane	<0.0047		0.0047	0.00099	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
cis-1,2-Dichloroethene	<0.0047		0.0047	0.00067	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
cis-1,3-Dichloropropene	<0.0047		0.0047	0.00062	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Dibromochloromethane	<0.0047		0.0047	0.00082	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
1,1-Dichloroethane	<0.0047		0.0047	0.00075	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
1,2-Dichloroethane	<0.0047		0.0047	0.00070	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
1,1-Dichloroethene	<0.0047		0.0047	0.00076	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
1,2-Dichloropropane	<0.0047		0.0047	0.00072	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
1,3-Dichloropropene, Total	<0.0047		0.0047	0.00062	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Ethylbenzene	<0.0047		0.0047	0.00095	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
2-Hexanone	<0.0047		0.0047	0.0014	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Methylene Chloride	<0.0047		0.0047	0.0013	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0012	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Methyl tert-butyl ether	<0.0047		0.0047	0.00078	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Styrene	<0.0047		0.0047	0.00062	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
1,1,2,2-Tetrachloroethane	<0.0047		0.0047	0.00095	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Tetrachloroethene	<0.0047		0.0047	0.00072	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Toluene	<0.0047		0.0047	0.00066	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
trans-1,2-Dichloroethene	<0.0047		0.0047	0.00065	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
trans-1,3-Dichloropropene	<0.0047		0.0047	0.00085	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
1,1,1-Trichloroethane	<0.0047		0.0047	0.00071	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
1,1,2-Trichloroethane	<0.0047		0.0047	0.00064	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Trichloroethene	<0.0047		0.0047	0.00078	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Vinyl acetate	<0.0047		0.0047	0.00074	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Vinyl chloride	<0.0047		0.0047	0.00099	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1
Xylenes, Total	<0.0094		0.0094	0.00043	mg/Kg	☼	03/25/14 07:20	03/26/14 14:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 122*	*03/25/14 07:20*	*03/26/14 14:41*	*1*
Dibromofluoromethane	*109*		*75 - 120*	*03/25/14 07:20*	*03/26/14 14:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*70 - 134*	*03/25/14 07:20*	*03/26/14 14:41*	*1*
Toluene-d8 (Surr)	*103*		*75 - 122*	*03/25/14 07:20*	*03/26/14 14:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.089	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-1

Client Sample ID: 2471-1-B01-1
Date Collected: 03/24/14 15:30
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-1
Matrix: Solid
Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
2-Methylphenol	<0.20	*	0.20	0.065	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.049	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
2-Methylnaphthalene	<0.040		0.040	0.0074	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
4,6-Dinitro-2-methylphenol	<0.40		0.40	0.32	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Phenanthrene	**0.0082**	**J**	0.040	0.0056	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Fluoranthene	**0.017**	**J**	0.040	0.0075	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Pyrene	**0.025**	**J**	0.040	0.0080	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Benzo[a]anthracene	**0.014**	**J**	0.040	0.0054	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1

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Lab Sample ID: 500-73777-1
Matrix: Solid
Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.021**	**J**	0.040	0.011	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Benzo[b]fluoranthene	**0.020**	**J**	0.040	0.0087	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Benzo[a]pyrene	**0.017**	**J**	0.040	0.0078	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Indeno[1,2,3-cd]pyrene	**0.018**	**J**	0.040	0.010	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
Benzo[g,h,i]perylene	**0.037**	**J**	0.040	0.013	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1
3 & 4 Methylphenol	<0.20	*	0.20	0.067	mg/Kg	☼	03/26/14 07:20	03/27/14 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*61*		*25 - 110*	*03/26/14 07:20*	*03/27/14 14:24*	*1*
Phenol-d5	*65*		*31 - 110*	*03/26/14 07:20*	*03/27/14 14:24*	*1*
Nitrobenzene-d5	*56*		*25 - 115*	*03/26/14 07:20*	*03/27/14 14:24*	*1*
2-Fluorobiphenyl	*64*		*25 - 119*	*03/26/14 07:20*	*03/27/14 14:24*	*1*
2,4,6-Tribromophenol	*71*		*35 - 137*	*03/26/14 07:20*	*03/27/14 14:24*	*1*
Terphenyl-d14	*90*		*36 - 134*	*03/26/14 07:20*	*03/27/14 14:24*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.45	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Arsenic	**5.9**		0.56	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Barium	**77**		0.56	0.060	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Beryllium	**0.70**		0.22	0.045	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Boron	**9.2**		2.8	0.56	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Cadmium	**0.27**	**B**	0.11	0.014	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Calcium	**19000**	**B**	11	3.0	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Chromium	**22**		0.56	0.065	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Cobalt	**8.2**		0.28	0.056	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Copper	**17**		0.56	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Iron	**19000**		11	4.6	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Lead	**18**		0.28	0.084	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Magnesium	**12000**	**B**	5.6	1.2	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Manganese	**270**		0.56	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Nickel	**23**		0.56	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Potassium	**3300**		28	1.7	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Selenium	<0.56		0.56	0.20	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Silver	<0.28		0.28	0.020	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Sodium	**160**		56	7.5	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Thallium	<0.56		0.56	0.24	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Vanadium	**26**		0.28	0.042	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	1
Zinc	**45**		1.1	0.23	mg/Kg	☼	03/25/14 16:00	03/26/14 16:59	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		04/02/14 09:00	04/02/14 17:36	1
Lead	<0.0075		0.0075	0.0075	mg/L		04/02/14 09:00	04/02/14 17:36	1
Manganese	**0.18**		0.025	0.010	mg/L		04/02/14 09:00	04/02/14 17:36	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-1

Client Sample ID: 2471-1-B01-1
Date Collected: 03/24/14 15:30
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.24	J	0.50	0.050	mg/L		03/28/14 09:00	03/28/14 18:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/28/14 09:00	03/28/14 18:28	1
Boron	0.86		0.10	0.050	mg/L		03/28/14 09:00	03/28/14 18:28	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/28/14 09:00	03/28/14 18:28	1
Chromium	0.064		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 18:28	1
Cobalt	0.015	J	0.025	0.010	mg/L		03/28/14 09:00	03/28/14 18:28	1
Iron	53	B	0.20	0.20	mg/L		03/28/14 09:00	03/28/14 18:28	1
Lead	0.025		0.0075	0.0075	mg/L		03/28/14 09:00	03/28/14 18:28	1
Manganese	0.31		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 18:28	1
Nickel	0.059		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 18:28	1
Selenium	<0.050		0.050	0.010	mg/L		03/28/14 09:00	03/28/14 18:28	1
Silver	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 18:28	1
Zinc	0.13	B	0.10	0.020	mg/L		03/28/14 09:00	03/28/14 18:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/28/14 09:00	03/31/14 17:47	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/28/14 09:00	03/31/14 17:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		03/28/14 14:45	03/31/14 10:24	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.010	J	0.020	0.0077	mg/Kg	☼	03/25/14 15:00	03/26/14 11:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.94		0.200	0.200	SU			03/31/14 14:17	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-1

Client Sample ID: 2471-1-B01-2
Date Collected: 03/24/14 15:35
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-2
Matrix: Solid
Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0070	*	0.0045	0.0019	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Benzene	<0.0045		0.0045	0.00061	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Bromodichloromethane	<0.0045		0.0045	0.00077	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Bromoform	<0.0045		0.0045	0.0010	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Bromomethane	<0.0045	*	0.0045	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
2-Butanone (MEK)	<0.0045		0.0045	0.0016	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Carbon disulfide	<0.0045		0.0045	0.00067	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Carbon tetrachloride	<0.0045	*	0.0045	0.00081	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Chlorobenzene	<0.0045		0.0045	0.00045	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Chloroethane	<0.0045	*	0.0045	0.0012	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Chloroform	<0.0045		0.0045	0.00051	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Chloromethane	<0.0045		0.0045	0.00094	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
cis-1,2-Dichloroethene	<0.0045		0.0045	0.00063	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
cis-1,3-Dichloropropene	<0.0045		0.0045	0.00059	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Dibromochloromethane	<0.0045		0.0045	0.00078	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
1,1-Dichloroethane	<0.0045		0.0045	0.00071	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
1,2-Dichloroethane	<0.0045		0.0045	0.00066	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
1,1-Dichloroethene	<0.0045		0.0045	0.00072	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
1,2-Dichloropropane	<0.0045		0.0045	0.00068	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
1,3-Dichloropropene, Total	<0.0045		0.0045	0.00059	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Ethylbenzene	<0.0045		0.0045	0.00090	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
2-Hexanone	<0.0045		0.0045	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Methylene Chloride	<0.0045		0.0045	0.0012	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0012	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Methyl tert-butyl ether	<0.0045		0.0045	0.00074	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Styrene	<0.0045		0.0045	0.00059	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
1,1,2,2-Tetrachloroethane	<0.0045		0.0045	0.00090	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Tetrachloroethene	<0.0045		0.0045	0.00068	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Toluene	<0.0045		0.0045	0.00063	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
trans-1,2-Dichloroethene	<0.0045		0.0045	0.00061	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
trans-1,3-Dichloropropene	<0.0045		0.0045	0.00080	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
1,1,1-Trichloroethane	<0.0045		0.0045	0.00067	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
1,1,2-Trichloroethane	<0.0045		0.0045	0.00061	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Trichloroethene	<0.0045		0.0045	0.00074	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Vinyl acetate	<0.0045		0.0045	0.00070	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Vinyl chloride	<0.0045		0.0045	0.00094	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1
Xylenes, Total	<0.0089		0.0089	0.00040	mg/Kg	☼	03/25/14 07:20	03/27/14 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 122*	*03/25/14 07:20*	*03/27/14 16:27*	*1*
Dibromofluoromethane	*103*		*75 - 120*	*03/25/14 07:20*	*03/27/14 16:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 134*	*03/25/14 07:20*	*03/27/14 16:27*	*1*
Toluene-d8 (Surr)	*99*		*75 - 122*	*03/25/14 07:20*	*03/27/14 16:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.088	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-1

Client Sample ID: 2471-1-B01-2
Date Collected: 03/24/14 15:35
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-2
Matrix: Solid
Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
2-Methylphenol	<0.20	*	0.20	0.064	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.048	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
2-Methylnaphthalene	<0.039		0.039	0.0073	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
2-Nitrophenol	<0.39		0.39	0.094	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Pentachlorophenol	<0.80		0.80	0.64	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
4,6-Dinitro-2-methylphenol	<0.39		0.39	0.32	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Pyrene	<0.039		0.039	0.0079	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1

Client Sample ID: 2471-1-B01-2
Date Collected: 03/24/14 15:35
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-2
Matrix: Solid
Percent Solids: 83.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Benzo[b]fluoranthene	<0.039		0.039	0.0086	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0077	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1
3 & 4 Methylphenol	<0.20	*	0.20	0.066	mg/Kg	☼	03/26/14 07:20	03/27/14 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*64*		*25 - 110*	*03/26/14 07:20*	*03/27/14 14:48*	*1*
Phenol-d5	*69*		*31 - 110*	*03/26/14 07:20*	*03/27/14 14:48*	*1*
Nitrobenzene-d5	*61*		*25 - 115*	*03/26/14 07:20*	*03/27/14 14:48*	*1*
2-Fluorobiphenyl	*66*		*25 - 119*	*03/26/14 07:20*	*03/27/14 14:48*	*1*
2,4,6-Tribromophenol	*72*		*35 - 137*	*03/26/14 07:20*	*03/27/14 14:48*	*1*
Terphenyl-d14	*89*		*36 - 134*	*03/26/14 07:20*	*03/27/14 14:48*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.44	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Arsenic	**7.1**		0.55	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Barium	**68**		0.55	0.059	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Beryllium	**0.71**		0.22	0.044	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Boron	**16**		2.8	0.55	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Cadmium	**0.38**	**B**	0.11	0.014	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Calcium	**45000**	**B**	11	3.0	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Chromium	**21**		0.55	0.064	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Cobalt	**9.6**		0.28	0.055	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Copper	**20**		0.55	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Iron	**20000**		11	4.5	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Lead	**9.0**		0.28	0.082	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Magnesium	**21000**	**B**	5.5	1.1	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Manganese	**320**		0.55	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Nickel	**24**		0.55	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Potassium	**4100**		28	1.7	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Selenium	<0.55		0.55	0.20	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Silver	<0.28		0.28	0.020	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Sodium	**280**		55	7.4	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Thallium	<0.55		0.55	0.23	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Vanadium	**26**		0.28	0.041	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	1
Zinc	**37**		1.1	0.22	mg/Kg	☼	03/25/14 16:00	03/26/14 17:06	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		04/02/14 09:00	04/02/14 18:01	1
Lead	<0.0075		0.0075	0.0075	mg/L		04/02/14 09:00	04/02/14 18:01	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-1

Client Sample ID: 2471-1-B01-2
Date Collected: 03/24/14 15:35
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.11	J	0.50	0.050	mg/L		03/28/14 09:00	03/28/14 19:08	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/28/14 09:00	03/28/14 19:08	1
Boron	0.76		0.10	0.050	mg/L		03/28/14 09:00	03/28/14 19:08	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/28/14 09:00	03/28/14 19:08	1
Chromium	0.010	J	0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:08	1
Cobalt	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:08	1
Iron	5.4	B	0.20	0.20	mg/L		03/28/14 09:00	03/28/14 19:08	1
Lead	0.046		0.0075	0.0075	mg/L		03/28/14 09:00	03/28/14 19:08	1
Manganese	0.095		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:08	1
Nickel	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:08	1
Selenium	<0.050		0.050	0.010	mg/L		03/28/14 09:00	03/28/14 19:08	1
Silver	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:08	1
Zinc	0.088	J B	0.10	0.020	mg/L		03/28/14 09:00	03/28/14 19:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/28/14 09:00	03/31/14 18:08	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/28/14 09:00	03/31/14 18:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		03/28/14 14:45	03/31/14 10:26	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.020	0.0077	mg/Kg	☼	03/25/14 15:00	03/26/14 11:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.83		0.200	0.200	SU			03/31/14 14:22	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
*	RPD of the LCS and LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
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 exceeds the control limits
F2	MS/MSD RPD exceeds control limits
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.
F1	MS and/or MSD Recovery exceeds the control 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
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)

500-73777 COC

CHAIN OF CUSTODY RECORD

Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	**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: Olympia Fields, Cook Co Project No.: IDOT2013-060 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** KAM, ZK (AEI)

COC No.: 1 of 1

Lab Job No.: 500-73777

Sample Temp: (2.8) (2.4)

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	2471-1-B01-1	3/24/14	3:30	S	X	X					X	X	X	X						0-5.5'
2	2471-1-B01-2	3/24/14	3:35	S	X	X					X	X	X	X						5.5'-11'
	2471-1-B02-1			S	X	X					X	X	X	X						
	2471-1-B02-2			S	X	X					X	X	X	X						

Relinquished by: Kam Mamd (AEI)	Date/Time 3/24/14 4:42	Received by: Sherri Scott	Date/Time 3/24/14 1642
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

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

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

I. Source Location Information

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

Project Name: FAU 3778 (Crawford Ave at 203rd Street) Office Phone Number, if available: _____

Physical Site Location (address, incldluding number and street):
20102-20260 Crawford Avenue

City: Olympia Fields State: IL Zip Code: 60443

County: Cook Township: Rich

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

Latitude: 41.52204 (Decimal Degrees) Longitude: -87.71336 (-Decimal Degrees)

Identify how the lat/long data were determined:

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

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

II. Owner/Operator Information for Source Site

Site Owner		Site Operator	
Name:	Illinois Department of Transportation	Name:	Illinois Department of Transportation
Street Address:	201 West Center Court	Street Address:	201 West Center Court
PO Box:		PO Box:	
City:	Schaumburg State: IL	City:	Schaumburg State: IL
Zip Code:	60196-1096 Phone: 847-705-4101	Zip Code:	60196-1096 Phone: 847-705-4101
Contact:	Sam Mead	Contact:	Sam Mead
Email, if available:	Sam.Mead@illinois.gov	Email, if available:	Sam.Mead@illinois.gov

Project Name: FAU 3778 (Crawford Ave at 203rd Street)

Latitude: 41.52204 Longitude: -87.71336

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 appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATIONS 2471-2-B02 THROUGH -B06 WERE SAMPLED ADJACENT TO SITE 2471-2. SEE TABLE 3b AND FIGURES 2 AND 3 OF THE REVISED 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 JOB ID NO.: 500-72414-2 & 500-73777-2

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

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

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

Company Name: IDOT Bureau of Design and Environment

Street Address: 2300 South Dirksen Parkway

City: Springfield State: IL Zip Code: 62764

Phone: 217.785.4246

Steven Gobelman
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

6/3/14
Date:

STEVEN GOBELMAN
196-000598
LICENSED
PROFESSIONAL
GEOLOGIST
STATE OF ILLINOIS

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Semivolatile Organic Compounds (mg/kg) (cont.)
Benzo (b) fluoranthene
Benzo (g,h,i) perylene
Benzo (k) fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo (a,h) anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno (1,2,3-cd) pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Potassium
Selenium
Silver
Sodium
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 2471-2

Residences

Sample ID	2471-2-B02	2471-2-B03	2471-2-B03 DUP	[1] Most Stringent MAC	[2] Outside a Populated Area MAC	[3] Populated non-Metropolitan Statistical Area MAC	[4] Within Chicago Corporate Limits MAC	[5] Metropolitan Statistical Area MAC	[6] Class I Soil TCLP/SPLP Comparisons Only	[7] Most Stringent TACO Tier 1 Residential Objective
Sample Depth (ft)	0-4	0-4	0-4							
Sample Date	2/28/2014	2/28/2014	2/28/2014							
PID	0	0	0							
Sample pH	8.86	8.66	8.2							
Matrix	Soil	Soil	Soil							
No Contaminants of Concern Noted.										

Sample ID	2471-2-B04	2471-2-B05	2471-2-B06	[1] Most Stringent MAC	[2] Outside a Populated Area MAC	[3] Populated non-Metropolitan Statistical Area MAC	[4] Within Chicago Corporate Limits MAC	[5] Metropolitan Statistical Area MAC	[6] Class I Soil TCLP/SPLP Comparisons Only	[7] Most Stringent TACO Tier 1 Residential Objective
Sample Depth (ft)	0-4	0-4	0-4							
Sample Date	2/28/2014	2/28/2014	3/24/2014							
PID	0	0	0							
Sample pH	8.49	8.43	8.09							
Matrix	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: 500-72414-2
Client Project/Site: IDOT - Olympia Fields - WO 060

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

Attn: Mike Nelson

Authorized for release by:
3/18/2014 3:10:28 PM

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: 2471-2-B02
Date Collected: 02/28/14 11:15
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-3
Matrix: Solid
Percent Solids: 78.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0061		0.0051	0.0022	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Benzene	<0.0051		0.0051	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Bromodichloromethane	<0.0051		0.0051	0.00088	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Bromoform	<0.0051		0.0051	0.0012	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Bromomethane	<0.0051		0.0051	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
2-Butanone (MEK)	<0.0051		0.0051	0.0019	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Carbon disulfide	<0.0051		0.0051	0.00076	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Carbon tetrachloride	<0.0051		0.0051	0.00093	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Chlorobenzene	<0.0051		0.0051	0.00052	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Chloroethane	<0.0051	*	0.0051	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Chloroform	<0.0051		0.0051	0.00059	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Chloromethane	<0.0051		0.0051	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
cis-1,2-Dichloroethene	<0.0051		0.0051	0.00072	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
cis-1,3-Dichloropropene	<0.0051		0.0051	0.00067	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Dibromochloromethane	<0.0051		0.0051	0.00089	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
1,1-Dichloroethane	<0.0051		0.0051	0.00081	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
1,2-Dichloroethane	<0.0051		0.0051	0.00076	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
1,1-Dichloroethene	<0.0051		0.0051	0.00083	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
1,2-Dichloropropane	<0.0051		0.0051	0.00078	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
1,3-Dichloropropene, Total	<0.0051		0.0051	0.00067	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Ethylbenzene	<0.0051		0.0051	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
2-Hexanone	<0.0051		0.0051	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Methylene Chloride	<0.0051		0.0051	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Methyl tert-butyl ether	<0.0051		0.0051	0.00085	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Styrene	<0.0051	*	0.0051	0.00067	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
1,1,2,2-Tetrachloroethane	<0.0051		0.0051	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Tetrachloroethene	<0.0051		0.0051	0.00078	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Toluene	<0.0051		0.0051	0.00072	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
trans-1,2-Dichloroethene	<0.0051		0.0051	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
trans-1,3-Dichloropropene	<0.0051		0.0051	0.00092	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
1,1,1-Trichloroethane	<0.0051		0.0051	0.00076	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
1,1,2-Trichloroethane	<0.0051		0.0051	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Trichloroethene	<0.0051		0.0051	0.00084	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Vinyl acetate	<0.0051		0.0051	0.00080	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Vinyl chloride	<0.0051		0.0051	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1
Xylenes, Total	<0.010		0.010	0.00046	mg/Kg	☼	02/28/14 14:25	03/04/14 13:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 122*	*02/28/14 14:25*	*03/04/14 13:14*	*1*
Dibromofluoromethane	*110*		*75 - 120*	*02/28/14 14:25*	*03/04/14 13:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*02/28/14 14:25*	*03/04/14 13:14*	*1*
Toluene-d8 (Surr)	*105*		*75 - 122*	*02/28/14 14:25*	*03/04/14 13:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.093	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-2

Client Sample ID: 2471-2-B02
Date Collected: 02/28/14 11:15
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-3
Matrix: Solid
Percent Solids: 78.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
N-Nitrosodi-n-propylamine	<0.21		0.21	0.051	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
4-Chloroaniline	<0.84	*	0.84	0.20	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
2-Methylnaphthalene	<0.041		0.041	0.0077	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
2-Nitrophenol	<0.41		0.41	0.099	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Fluorene	<0.041		0.041	0.0059	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
4,6-Dinitro-2-methylphenol	<0.41		0.41	0.34	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Phenanthrene	<0.041		0.041	0.0058	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Anthracene	<0.041		0.041	0.0070	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Carbazole	<0.21	*	0.21	0.11	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Pyrene	<0.041		0.041	0.0083	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Benzo[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1

Client Sample ID: 2471-2-B02
Date Collected: 02/28/14 11:15
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-3
Matrix: Solid
Percent Solids: 78.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Benzo[b]fluoranthene	<0.041		0.041	0.0090	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Benzo[a]pyrene	<0.041		0.041	0.0081	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0081	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	03/06/14 06:51	03/06/14 21:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*54*		*25 - 110*	*03/06/14 06:51*	*03/06/14 21:27*	*1*
Phenol-d5	*63*		*31 - 110*	*03/06/14 06:51*	*03/06/14 21:27*	*1*
Nitrobenzene-d5	*67*		*25 - 115*	*03/06/14 06:51*	*03/06/14 21:27*	*1*
2-Fluorobiphenyl	*69*		*25 - 119*	*03/06/14 06:51*	*03/06/14 21:27*	*1*
2,4,6-Tribromophenol	*80*		*35 - 137*	*03/06/14 06:51*	*03/06/14 21:27*	*1*
Terphenyl-d14	*90*		*36 - 134*	*03/06/14 06:51*	*03/06/14 21:27*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.48	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Arsenic	**7.4**		0.59	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Barium	**110**		0.59	0.064	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Beryllium	**0.88**		0.24	0.047	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Boron	**9.9**		3.0	0.59	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Cadmium	<0.12		0.12	0.015	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Calcium	**4600**	**B**	12	3.2	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Chromium	**27**		0.59	0.069	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Cobalt	**13**		0.30	0.059	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Copper	**23**		0.59	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Iron	**25000**		12	4.9	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Lead	**13**	**B**	0.30	0.088	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Magnesium	**7200**	**B**	5.9	1.2	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Manganese	**670**		0.59	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Nickel	**38**		0.59	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Potassium	**2900**		30	1.8	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Selenium	<0.59		0.59	0.21	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Silver	<0.30		0.30	0.021	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Sodium	**530**		59	8.0	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Thallium	**0.86**		0.59	0.25	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Vanadium	**31**		0.30	0.044	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1
Zinc	**57**		1.2	0.24	mg/Kg	☼	03/05/14 09:15	03/06/14 16:21	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.025		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 21:40	1
Iron	<0.20		0.20	0.20	mg/L		03/17/14 06:45	03/17/14 21:40	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/17/14 06:45	03/17/14 21:40	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-2

Client Sample ID: 2471-2-B02
Date Collected: 02/28/14 11:15
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.019	J	0.025	0.010	mg/L		03/17/14 06:45	03/17/14 21:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.40	J	0.50	0.050	mg/L		03/10/14 18:00	03/11/14 12:42	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/10/14 18:00	03/11/14 12:42	1
Boron	1.6	B	0.15	0.050	mg/L		03/10/14 18:00	03/11/14 12:42	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/10/14 18:00	03/11/14 12:42	1
Chromium	0.11		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:42	1
Cobalt	0.020	J	0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:42	1
Iron	81		0.20	0.20	mg/L		03/10/14 18:00	03/11/14 12:42	1
Lead	0.026		0.0075	0.0075	mg/L		03/10/14 18:00	03/11/14 12:42	1
Manganese	0.37		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:42	1
Nickel	0.082		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:42	1
Selenium	<0.050		0.050	0.010	mg/L		03/10/14 18:00	03/11/14 12:42	1
Silver	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:42	1
Zinc	0.23		0.10	0.020	mg/L		03/10/14 18:00	03/11/14 12:42	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		03/10/14 18:00	03/11/14 15:51	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/10/14 18:00	03/11/14 15:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000077	J	0.00020	0.000020	mg/L		03/10/14 17:00	03/11/14 12:09	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.020	0.0078	mg/Kg	☼	03/03/14 15:30	03/04/14 11:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.86		0.200	0.200	SU			03/04/14 13:08	1

Client Sample ID: 2471-2-B03
Date Collected: 02/28/14 11:00
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-4
Matrix: Solid
Percent Solids: 80.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0051		0.0051	0.0022	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Benzene	<0.0051		0.0051	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Bromodichloromethane	<0.0051		0.0051	0.00088	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Bromoform	<0.0051		0.0051	0.0012	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Bromomethane	<0.0051		0.0051	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
2-Butanone (MEK)	<0.0051		0.0051	0.0019	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Carbon disulfide	<0.0051		0.0051	0.00077	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Carbon tetrachloride	<0.0051		0.0051	0.00093	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Chlorobenzene	<0.0051		0.0051	0.00052	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Chloroethane	<0.0051	*	0.0051	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Chloroform	<0.0051		0.0051	0.00059	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Chloromethane	<0.0051		0.0051	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
cis-1,2-Dichloroethene	<0.0051		0.0051	0.00072	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
cis-1,3-Dichloropropene	<0.0051		0.0051	0.00067	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Dibromochloromethane	<0.0051		0.0051	0.00089	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
1,1-Dichloroethane	<0.0051		0.0051	0.00081	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
1,2-Dichloroethane	<0.0051		0.0051	0.00076	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
1,1-Dichloroethene	<0.0051		0.0051	0.00083	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
1,2-Dichloropropane	<0.0051		0.0051	0.00078	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
1,3-Dichloropropene, Total	<0.0051		0.0051	0.00067	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Ethylbenzene	<0.0051		0.0051	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
2-Hexanone	<0.0051		0.0051	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Methylene Chloride	<0.0051		0.0051	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Methyl tert-butyl ether	<0.0051		0.0051	0.00085	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Styrene	<0.0051	*	0.0051	0.00067	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
1,1,2,2-Tetrachloroethane	<0.0051		0.0051	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Tetrachloroethene	<0.0051		0.0051	0.00078	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Toluene	<0.0051		0.0051	0.00072	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
trans-1,2-Dichloroethene	<0.0051		0.0051	0.00071	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
trans-1,3-Dichloropropene	<0.0051		0.0051	0.00092	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
1,1,1-Trichloroethane	<0.0051		0.0051	0.00077	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
1,1,2-Trichloroethane	<0.0051		0.0051	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Trichloroethene	<0.0051		0.0051	0.00085	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Vinyl acetate	<0.0051		0.0051	0.00081	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Vinyl chloride	<0.0051		0.0051	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1
Xylenes, Total	<0.010		0.010	0.00046	mg/Kg	☼	02/28/14 14:25	03/04/14 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 122*	*02/28/14 14:25*	*03/04/14 13:37*	*1*
Dibromofluoromethane	*107*		*75 - 120*	*02/28/14 14:25*	*03/04/14 13:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*02/28/14 14:25*	*03/04/14 13:37*	*1*
Toluene-d8 (Surr)	*109*		*75 - 122*	*02/28/14 14:25*	*03/04/14 13:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.091	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-2

Client Sample ID: 2471-2-B03
Date Collected: 02/28/14 11:00
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-4
Matrix: Solid
Percent Solids: 80.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.050	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
2-Chlorophenol	<0.20		0.20	0.070	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
4-Chloroaniline	<0.82	*	0.82	0.19	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
2-Methylnaphthalene	<0.040		0.040	0.0075	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
4,6-Dinitro-2-methylphenol	<0.40		0.40	0.33	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Phenanthrene	**0.026**	**J**	0.040	0.0057	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Carbazole	<0.20	*	0.20	0.11	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Fluoranthene	**0.036**	**J**	0.040	0.0076	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Pyrene	**0.032**	**J**	0.040	0.0081	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Butyl benzyl phthalate	<0.20		0.20	0.078	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Benzo[a]anthracene	**0.019**	**J**	0.040	0.0055	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1

Client Sample ID: 2471-2-B03
Date Collected: 02/28/14 11:00
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-4
Matrix: Solid
Percent Solids: 80.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.018**	**J**	0.040	0.011	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Benzo[b]fluoranthene	**0.023**	**J**	0.040	0.0088	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Benzo[a]pyrene	**0.016**	**J**	0.040	0.0079	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Indeno[1,2,3-cd]pyrene	**0.012**	**J**	0.040	0.011	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	03/06/14 06:51	03/07/14 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*52*		*25 - 110*	*03/06/14 06:51*	*03/07/14 20:25*	*1*
Phenol-d5	*51*		*31 - 110*	*03/06/14 06:51*	*03/07/14 20:25*	*1*
Nitrobenzene-d5	*57*		*25 - 115*	*03/06/14 06:51*	*03/07/14 20:25*	*1*
2-Fluorobiphenyl	*46*		*25 - 119*	*03/06/14 06:51*	*03/07/14 20:25*	*1*
2,4,6-Tribromophenol	*52*		*35 - 137*	*03/06/14 06:51*	*03/07/14 20:25*	*1*
Terphenyl-d14	*71*		*36 - 134*	*03/06/14 06:51*	*03/07/14 20:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.49	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Arsenic	**6.0**		0.61	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Barium	**98**		0.61	0.065	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Beryllium	**0.70**		0.24	0.049	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Boron	**5.7**		3.0	0.61	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Cadmium	<0.12		0.12	0.015	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Calcium	**6800**	**B**	12	3.3	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Chromium	**21**		0.61	0.071	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Cobalt	**11**		0.30	0.061	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Copper	**13**		0.61	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Iron	**22000**		12	5.0	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Lead	**12**	**B**	0.30	0.091	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Magnesium	**6800**	**B**	6.1	1.3	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Manganese	**470**		0.61	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Nickel	**23**		0.61	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Potassium	**2000**		30	1.8	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Selenium	**0.27**	**J**	0.61	0.22	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Silver	<0.30		0.30	0.022	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Sodium	**1200**		61	8.2	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Thallium	**0.61**		0.61	0.26	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Vanadium	**25**		0.30	0.045	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1
Zinc	**42**		1.2	0.25	mg/Kg	☼	03/05/14 09:15	03/06/14 16:27	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/17/14 06:45	03/17/14 21:45	1
Chromium	<0.025		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 21:45	1
Iron	<0.20		0.20	0.20	mg/L		03/17/14 06:45	03/17/14 21:45	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-2

Client Sample ID: 2471-2-B03
Date Collected: 02/28/14 11:00
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		03/17/14 06:45	03/17/14 21:45	1
Manganese	**0.099**		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 21:45	1
Nickel	<0.025		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 21:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.98**		0.50	0.050	mg/L		03/10/14 18:00	03/11/14 12:48	1
Beryllium	**0.0077**		0.0040	0.0040	mg/L		03/10/14 18:00	03/11/14 12:48	1
Boron	**1.8**	**B**	0.15	0.050	mg/L		03/10/14 18:00	03/11/14 12:48	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/10/14 18:00	03/11/14 12:48	1
Chromium	**0.22**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:48	1
Cobalt	**0.041**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:48	1
Iron	**190**		0.20	0.20	mg/L		03/10/14 18:00	03/11/14 12:48	1
Lead	**0.059**		0.0075	0.0075	mg/L		03/10/14 18:00	03/11/14 12:48	1
Manganese	**0.73**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:48	1
Nickel	**0.18**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:48	1
Selenium	<0.050		0.050	0.010	mg/L		03/10/14 18:00	03/11/14 12:48	1
Silver	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:48	1
Zinc	**0.42**		0.10	0.020	mg/L		03/10/14 18:00	03/11/14 12:48	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		03/10/14 18:00	03/11/14 15:55	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/10/14 18:00	03/14/14 12:06	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00021**		0.00020	0.000020	mg/L		03/10/14 17:00	03/11/14 12:11	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**		0.020	0.0077	mg/Kg	☼	03/03/14 15:30	03/04/14 11:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.66**		0.200	0.200	SU			03/04/14 13:12	1

Client Sample ID: 2471-2-B03 Dup
Date Collected: 02/28/14 11:05
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-5
Matrix: Solid
Percent Solids: 78.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0050		0.0050	0.0022	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Benzene	<0.0050		0.0050	0.00069	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Bromodichloromethane	<0.0050		0.0050	0.00087	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Bromoform	<0.0050		0.0050	0.0012	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Bromomethane	<0.0050		0.0050	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
2-Butanone (MEK)	<0.0050		0.0050	0.0018	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Carbon disulfide	<0.0050		0.0050	0.00075	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Carbon tetrachloride	<0.0050		0.0050	0.00092	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Chlorobenzene	<0.0050		0.0050	0.00051	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Chloroethane	<0.0050	*	0.0050	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Chloroform	<0.0050		0.0050	0.00058	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Chloromethane	<0.0050		0.0050	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
cis-1,2-Dichloroethene	<0.0050		0.0050	0.00071	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
cis-1,3-Dichloropropene	<0.0050		0.0050	0.00066	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Dibromochloromethane	<0.0050		0.0050	0.00088	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
1,1-Dichloroethane	<0.0050		0.0050	0.00080	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
1,2-Dichloroethane	<0.0050		0.0050	0.00075	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
1,1-Dichloroethene	<0.0050		0.0050	0.00081	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
1,2-Dichloropropane	<0.0050		0.0050	0.00077	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
1,3-Dichloropropene, Total	<0.0050		0.0050	0.00066	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Ethylbenzene	<0.0050		0.0050	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
2-Hexanone	<0.0050		0.0050	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Methylene Chloride	<0.0050		0.0050	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
4-Methyl-2-pentanone (MIBK)	<0.0050		0.0050	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Methyl tert-butyl ether	<0.0050		0.0050	0.00083	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Styrene	<0.0050	*	0.0050	0.00066	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
1,1,2,2-Tetrachloroethane	<0.0050		0.0050	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Tetrachloroethene	<0.0050		0.0050	0.00077	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Toluene	<0.0050		0.0050	0.00071	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
trans-1,2-Dichloroethene	<0.0050		0.0050	0.00069	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
trans-1,3-Dichloropropene	<0.0050		0.0050	0.00090	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
1,1,1-Trichloroethane	<0.0050		0.0050	0.00075	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
1,1,2-Trichloroethane	<0.0050		0.0050	0.00069	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Trichloroethene	<0.0050		0.0050	0.00083	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Vinyl acetate	<0.0050		0.0050	0.00079	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Vinyl chloride	<0.0050		0.0050	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1
Xylenes, Total	<0.010		0.010	0.00046	mg/Kg	☼	02/28/14 14:25	03/04/14 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 122*	*02/28/14 14:25*	*03/04/14 14:00*	*1*
Dibromofluoromethane	*110*		*75 - 120*	*02/28/14 14:25*	*03/04/14 14:00*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*70 - 134*	*02/28/14 14:25*	*03/04/14 14:00*	*1*
Toluene-d8 (Surr)	*107*		*75 - 122*	*02/28/14 14:25*	*03/04/14 14:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.089	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-2

Client Sample ID: 2471-2-B03 Dup
Date Collected: 02/28/14 11:05
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-5
Matrix: Solid
Percent Solids: 78.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
2-Methylphenol	<0.20		0.20	0.064	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.049	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
4-Chloroaniline	<0.81	*	0.81	0.19	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
2-Methylnaphthalene	<0.040		0.040	0.0074	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
4,6-Dinitro-2-methylphenol	<0.40		0.40	0.32	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Carbazole	<0.20	*	0.20	0.10	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1

Client Sample ID: 2471-2-B03 Dup
Date Collected: 02/28/14 11:05
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-5
Matrix: Solid
Percent Solids: 78.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	03/06/14 06:51	03/06/14 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*52*		*25 - 110*	*03/06/14 06:51*	*03/06/14 22:10*	*1*
Phenol-d5	*58*		*31 - 110*	*03/06/14 06:51*	*03/06/14 22:10*	*1*
Nitrobenzene-d5	*49*		*25 - 115*	*03/06/14 06:51*	*03/06/14 22:10*	*1*
2-Fluorobiphenyl	*60*		*25 - 119*	*03/06/14 06:51*	*03/06/14 22:10*	*1*
2,4,6-Tribromophenol	*64*		*35 - 137*	*03/06/14 06:51*	*03/06/14 22:10*	*1*
Terphenyl-d14	*79*		*36 - 134*	*03/06/14 06:51*	*03/06/14 22:10*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.49	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Arsenic	**7.1**		0.61	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Barium	**110**		0.61	0.066	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Beryllium	**0.86**		0.25	0.049	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Boron	**9.9**		3.1	0.61	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Cadmium	<0.12		0.12	0.016	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Calcium	**5100**	**B**	12	3.3	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Chromium	**25**		0.61	0.071	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Cobalt	**12**		0.31	0.061	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Copper	**21**		0.61	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Iron	**25000**		12	5.0	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Lead	**11**	**B**	0.31	0.092	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Magnesium	**6900**	**B**	6.1	1.3	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Manganese	**390**		0.61	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Nickel	**31**		0.61	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Potassium	**2600**		31	1.8	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Selenium	**0.37**	**J**	0.61	0.22	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Silver	<0.31		0.31	0.022	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Sodium	**1100**		61	8.2	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Thallium	**0.52**	**J**	0.61	0.26	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Vanadium	**28**		0.31	0.045	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1
Zinc	**46**		1.2	0.25	mg/Kg	☼	03/05/14 09:15	03/06/14 16:33	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/17/14 06:45	03/17/14 21:50	1
Chromium	<0.025		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 21:50	1
Iron	<0.20		0.20	0.20	mg/L		03/17/14 06:45	03/17/14 21:50	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-2

Client Sample ID: 2471-2-B03 Dup
Date Collected: 02/28/14 11:05
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		03/17/14 06:45	03/17/14 21:50	1
Manganese	**0.13**		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 21:50	1
Nickel	<0.025		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 21:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.64**		0.50	0.050	mg/L		03/10/14 18:00	03/11/14 12:54	1
Beryllium	**0.0057**		0.0040	0.0040	mg/L		03/10/14 18:00	03/11/14 12:54	1
Boron	**1.5**	**B**	0.15	0.050	mg/L		03/10/14 18:00	03/11/14 12:54	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/10/14 18:00	03/11/14 12:54	1
Chromium	**0.15**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:54	1
Cobalt	**0.026**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:54	1
Iron	**130**		0.20	0.20	mg/L		03/10/14 18:00	03/11/14 12:54	1
Lead	**0.037**		0.0075	0.0075	mg/L		03/10/14 18:00	03/11/14 12:54	1
Manganese	**0.49**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:54	1
Nickel	**0.14**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:54	1
Selenium	<0.050		0.050	0.010	mg/L		03/10/14 18:00	03/11/14 12:54	1
Silver	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 12:54	1
Zinc	**0.27**		0.10	0.020	mg/L		03/10/14 18:00	03/11/14 12:54	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		03/10/14 18:00	03/11/14 15:58	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/10/14 18:00	03/14/14 12:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00019**	**J**	0.00020	0.000020	mg/L		03/10/14 17:00	03/11/14 12:13	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.019		0.019	0.0073	mg/Kg	☼	03/03/14 15:30	03/04/14 11:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.20**		0.200	0.200	SU			03/04/14 13:16	1

Client Sample ID: 2471-2-B04
Date Collected: 02/28/14 10:50
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-6
Matrix: Solid
Percent Solids: 77.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0053		0.0053	0.0023	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Benzene	<0.0053		0.0053	0.00073	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Bromodichloromethane	<0.0053		0.0053	0.00091	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Bromoform	<0.0053		0.0053	0.0012	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Bromomethane	<0.0053		0.0053	0.0016	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
2-Butanone (MEK)	<0.0053		0.0053	0.0019	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Carbon disulfide	<0.0053		0.0053	0.00079	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Carbon tetrachloride	<0.0053		0.0053	0.00097	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Chlorobenzene	<0.0053		0.0053	0.00054	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Chloroethane	<0.0053	*	0.0053	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Chloroform	<0.0053		0.0053	0.00061	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Chloromethane	<0.0053		0.0053	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
cis-1,2-Dichloroethene	<0.0053		0.0053	0.00075	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
cis-1,3-Dichloropropene	<0.0053		0.0053	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Dibromochloromethane	<0.0053		0.0053	0.00092	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
1,1-Dichloroethane	<0.0053		0.0053	0.00084	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
1,2-Dichloroethane	<0.0053		0.0053	0.00079	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
1,1-Dichloroethene	<0.0053		0.0053	0.00086	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
1,2-Dichloropropane	<0.0053		0.0053	0.00081	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
1,3-Dichloropropene, Total	<0.0053		0.0053	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Ethylbenzene	<0.0053		0.0053	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
2-Hexanone	<0.0053		0.0053	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Methylene Chloride	<0.0053		0.0053	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
4-Methyl-2-pentanone (MIBK)	<0.0053		0.0053	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Methyl tert-butyl ether	<0.0053		0.0053	0.00088	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Styrene	<0.0053	*	0.0053	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
1,1,2,2-Tetrachloroethane	<0.0053		0.0053	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Tetrachloroethene	<0.0053		0.0053	0.00081	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Toluene	<0.0053		0.0053	0.00074	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
trans-1,2-Dichloroethene	<0.0053		0.0053	0.00073	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
trans-1,3-Dichloropropene	<0.0053		0.0053	0.00095	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
1,1,1-Trichloroethane	<0.0053		0.0053	0.00079	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
1,1,2-Trichloroethane	<0.0053		0.0053	0.00072	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Trichloroethene	<0.0053		0.0053	0.00088	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Vinyl acetate	<0.0053		0.0053	0.00083	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Vinyl chloride	<0.0053		0.0053	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1
Xylenes, Total	<0.011		0.011	0.00048	mg/Kg	☼	02/28/14 14:25	03/04/14 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 122*	*02/28/14 14:25*	*03/04/14 14:23*	*1*
Dibromofluoromethane	*117*		*75 - 120*	*02/28/14 14:25*	*03/04/14 14:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*02/28/14 14:25*	*03/04/14 14:23*	*1*
Toluene-d8 (Surr)	*100*		*75 - 122*	*02/28/14 14:25*	*03/04/14 14:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.093	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-2

Client Sample ID: 2471-2-B04
Date Collected: 02/28/14 10:50
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-6
Matrix: Solid
Percent Solids: 77.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
N-Nitrosodi-n-propylamine	<0.21		0.21	0.051	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
4-Chloroaniline	<0.84	*	0.84	0.20	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
2-Methylnaphthalene	<0.041		0.041	0.0077	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Fluorene	<0.041		0.041	0.0059	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
4,6-Dinitro-2-methylphenol	<0.41		0.41	0.33	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Phenanthrene	<0.041		0.041	0.0058	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Anthracene	<0.041		0.041	0.0070	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Carbazole	<0.21	*	0.21	0.11	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Pyrene	<0.041		0.041	0.0083	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Benzo[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-2

Client Sample ID: 2471-2-B04
Date Collected: 02/28/14 10:50
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-6
Matrix: Solid
Percent Solids: 77.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Benzo[b]fluoranthene	<0.041		0.041	0.0090	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Benzo[a]pyrene	<0.041		0.041	0.0081	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0081	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	03/06/14 06:51	03/06/14 22:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*56*		*25 - 110*	*03/06/14 06:51*	*03/06/14 22:32*	*1*
Phenol-d5	*68*		*31 - 110*	*03/06/14 06:51*	*03/06/14 22:32*	*1*
Nitrobenzene-d5	*58*		*25 - 115*	*03/06/14 06:51*	*03/06/14 22:32*	*1*
2-Fluorobiphenyl	*63*		*25 - 119*	*03/06/14 06:51*	*03/06/14 22:32*	*1*
2,4,6-Tribromophenol	*84*		*35 - 137*	*03/06/14 06:51*	*03/06/14 22:32*	*1*
Terphenyl-d14	*91*		*36 - 134*	*03/06/14 06:51*	*03/06/14 22:32*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.3		1.3	0.51	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Arsenic	**5.2**		0.64	0.13	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Barium	**88**		0.64	0.068	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Beryllium	**0.77**		0.26	0.051	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Boron	**13**		3.2	0.64	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Cadmium	**0.23**		0.13	0.016	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Calcium	**59000**	**B**	13	3.5	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Chromium	**24**		0.64	0.074	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Cobalt	**10**		0.32	0.064	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Copper	**16**		0.64	0.13	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Iron	**21000**		13	5.3	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Lead	**8.1**	**B**	0.32	0.095	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Magnesium	**19000**	**B**	6.4	1.3	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Manganese	**390**		0.64	0.13	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Nickel	**28**		0.64	0.13	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Potassium	**3500**		32	1.9	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Selenium	<0.64		0.64	0.23	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Silver	<0.32		0.32	0.023	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Sodium	**630**		64	8.6	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Thallium	<0.64		0.64	0.27	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Vanadium	**27**		0.32	0.047	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	1
Zinc	**39**		1.3	0.26	mg/Kg	☼	03/05/14 09:15	03/06/14 16:39	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		03/17/14 06:45	03/17/14 21:55	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/17/14 06:45	03/17/14 21:55	1
Manganese	**0.032**		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 21:55	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-2

Client Sample ID: 2471-2-B04
Date Collected: 02/28/14 10:50
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-6
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.24	J	0.50	0.050	mg/L		03/10/14 18:00	03/11/14 13:01	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/10/14 18:00	03/11/14 13:01	1
Boron	1.2	B	0.15	0.050	mg/L		03/10/14 18:00	03/11/14 13:01	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/10/14 18:00	03/11/14 13:01	1
Chromium	0.058		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:01	1
Cobalt	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:01	1
Iron	40		0.20	0.20	mg/L		03/10/14 18:00	03/11/14 13:01	1
Lead	0.012		0.0075	0.0075	mg/L		03/10/14 18:00	03/11/14 13:01	1
Manganese	0.18		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:01	1
Nickel	0.043		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:01	1
Selenium	<0.050		0.050	0.010	mg/L		03/10/14 18:00	03/11/14 13:01	1
Silver	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:01	1
Zinc	0.097	J	0.10	0.020	mg/L		03/10/14 18:00	03/11/14 13:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/10/14 18:00	03/11/14 16:02	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/10/14 18:00	03/11/14 16:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000028	J	0.00020	0.000020	mg/L		03/10/14 17:00	03/11/14 12:15	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.033		0.019	0.0076	mg/Kg	☼	03/03/14 15:30	03/04/14 11:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.49		0.200	0.200	SU			03/04/14 13:20	1

Client Sample ID: 2471-2-B05
Date Collected: 02/28/14 10:40
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-7
Matrix: Solid
Percent Solids: 80.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0033	J	0.0051	0.0022	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Benzene	<0.0051		0.0051	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Bromodichloromethane	<0.0051		0.0051	0.00088	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Bromoform	<0.0051		0.0051	0.0012	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Bromomethane	<0.0051		0.0051	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
2-Butanone (MEK)	<0.0051		0.0051	0.0018	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Carbon disulfide	<0.0051		0.0051	0.00076	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Carbon tetrachloride	<0.0051		0.0051	0.00093	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Chlorobenzene	<0.0051		0.0051	0.00052	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Chloroethane	<0.0051	*	0.0051	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Chloroform	<0.0051		0.0051	0.00059	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Chloromethane	<0.0051		0.0051	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
cis-1,2-Dichloroethene	<0.0051		0.0051	0.00072	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
cis-1,3-Dichloropropene	<0.0051		0.0051	0.00067	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Dibromochloromethane	<0.0051		0.0051	0.00089	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
1,1-Dichloroethane	<0.0051		0.0051	0.00081	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
1,2-Dichloroethane	<0.0051		0.0051	0.00075	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
1,1-Dichloroethene	<0.0051		0.0051	0.00082	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
1,2-Dichloropropane	<0.0051		0.0051	0.00077	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
1,3-Dichloropropene, Total	<0.0051		0.0051	0.00067	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Ethylbenzene	<0.0051		0.0051	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
2-Hexanone	<0.0051		0.0051	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Methylene Chloride	<0.0051		0.0051	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Methyl tert-butyl ether	<0.0051		0.0051	0.00084	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Styrene	<0.0051	*	0.0051	0.00067	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
1,1,2,2-Tetrachloroethane	<0.0051		0.0051	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Tetrachloroethene	<0.0051		0.0051	0.00078	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Toluene	<0.0051		0.0051	0.00071	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
trans-1,2-Dichloroethene	<0.0051		0.0051	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
trans-1,3-Dichloropropene	<0.0051		0.0051	0.00091	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
1,1,1-Trichloroethane	<0.0051		0.0051	0.00076	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
1,1,2-Trichloroethane	<0.0051		0.0051	0.00069	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Trichloroethene	<0.0051		0.0051	0.00084	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Vinyl acetate	<0.0051		0.0051	0.00080	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Vinyl chloride	<0.0051		0.0051	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1
Xylenes, Total	<0.010		0.010	0.00046	mg/Kg	☼	02/28/14 14:25	03/04/14 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 122*	*02/28/14 14:25*	*03/04/14 14:46*	*1*
Dibromofluoromethane	*104*		*75 - 120*	*02/28/14 14:25*	*03/04/14 14:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*02/28/14 14:25*	*03/04/14 14:46*	*1*
Toluene-d8 (Surr)	*103*		*75 - 122*	*02/28/14 14:25*	*03/04/14 14:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-2

Client Sample ID: 2471-2-B05
Date Collected: 02/28/14 10:40
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-7
Matrix: Solid
Percent Solids: 80.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.049	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
4-Chloroaniline	<0.81	*	0.81	0.19	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
2-Methylnaphthalene	<0.040		0.040	0.0074	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
4,6-Dinitro-2-methylphenol	<0.40		0.40	0.32	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Carbazole	<0.20	*	0.20	0.10	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-2

Client Sample ID: 2471-2-B05
Date Collected: 02/28/14 10:40
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-7
Matrix: Solid
Percent Solids: 80.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1
3 & 4 Methylphenol	<0.20		0.20	0.067	mg/Kg	☼	03/06/14 06:51	03/06/14 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*60*		*25 - 110*	*03/06/14 06:51*	*03/06/14 22:54*	*1*
Phenol-d5	*66*		*31 - 110*	*03/06/14 06:51*	*03/06/14 22:54*	*1*
Nitrobenzene-d5	*56*		*25 - 115*	*03/06/14 06:51*	*03/06/14 22:54*	*1*
2-Fluorobiphenyl	*66*		*25 - 119*	*03/06/14 06:51*	*03/06/14 22:54*	*1*
2,4,6-Tribromophenol	*76*		*35 - 137*	*03/06/14 06:51*	*03/06/14 22:54*	*1*
Terphenyl-d14	*88*		*36 - 134*	*03/06/14 06:51*	*03/06/14 22:54*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.47	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Arsenic	**5.5**		0.58	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Barium	**87**		0.58	0.062	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Beryllium	**0.75**		0.23	0.047	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Boron	**11**		2.9	0.58	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Cadmium	**0.17**		0.12	0.015	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Calcium	**27000**	**B**	12	3.2	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Chromium	**22**		0.58	0.068	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Cobalt	**9.8**		0.29	0.058	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Copper	**16**		0.58	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Iron	**20000**		12	4.8	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Lead	**8.8**	**B**	0.29	0.087	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Magnesium	**18000**	**B**	5.8	1.2	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Manganese	**450**		0.58	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Nickel	**25**		0.58	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Potassium	**2700**		29	1.8	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Selenium	<0.58		0.58	0.21	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Silver	<0.29		0.29	0.021	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Sodium	**620**		58	7.8	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Thallium	<0.58		0.58	0.25	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Vanadium	**28**		0.29	0.043	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1
Zinc	**38**		1.2	0.24	mg/Kg	☼	03/05/14 09:15	03/06/14 16:46	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/17/14 06:45	03/17/14 22:00	1
Chromium	<0.025		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 22:00	1
Iron	<0.20		0.20	0.20	mg/L		03/17/14 06:45	03/17/14 22:00	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-2

Client Sample ID: 2471-2-B05
Date Collected: 02/28/14 10:40
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		03/17/14 06:45	03/17/14 22:00	1
Manganese	**0.051**		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 22:00	1
Nickel	<0.025		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 22:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.70**		0.50	0.050	mg/L		03/10/14 18:00	03/11/14 13:07	1
Beryllium	**0.0059**		0.0040	0.0040	mg/L		03/10/14 18:00	03/11/14 13:07	1
Boron	**0.38**	**B**	0.15	0.050	mg/L		03/10/14 18:00	03/11/14 13:07	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/10/14 18:00	03/11/14 13:07	1
Chromium	**0.16**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:07	1
Cobalt	**0.032**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:07	1
Iron	**120**		0.20	0.20	mg/L		03/10/14 18:00	03/11/14 13:07	1
Lead	**0.032**		0.0075	0.0075	mg/L		03/10/14 18:00	03/11/14 13:07	1
Manganese	**0.63**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:07	1
Nickel	**0.13**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:07	1
Selenium	<0.050		0.050	0.010	mg/L		03/10/14 18:00	03/11/14 13:07	1
Silver	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:07	1
Zinc	**0.24**		0.10	0.020	mg/L		03/10/14 18:00	03/11/14 13:07	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		03/10/14 18:00	03/11/14 16:15	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/10/14 18:00	03/14/14 12:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00014**	**J**	0.00020	0.000020	mg/L		03/10/14 17:00	03/11/14 12:16	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.021**		0.020	0.0076	mg/Kg	☼	03/03/14 15:30	03/04/14 11:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.43**		0.200	0.200	SU			03/04/14 13:24	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

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

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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CHAIN OF CUSTODY RECORD

ANDREWS ENGINEERING INC

Client Contact	Laboratory	Project Name: Olympia Fields, Cook Co.	COC No.: 1 of 1
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 No.: IDOT 2013-060 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** KAM / ZK	Lab Job No.: 500-72414 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
3	2471-2-B02	2/28/14	11:15	S	X	X					X	X	X	X						0'-4'
4	2471-2-B03	↓	11:00	S	X	X					X	X	X	X						0'-4'
5	2471-2-B03-DVP		11:05	S	X	X					X	X	X	X						0'-4'
6	2471-2-B04		10:50	S	X	X					X	X	X	X						0'-4'
7	2471-2-B05		10:40	S	X	X					X	X	X	X						0'-4'

Relinquished by:	Date/Time	Received by:	Date/Time
Kim A. Mund (AEI)	2/28/14 12:44	[signature]	2/28/14 1246
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

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: 500-73777-2
Client Project/Site: IDOT - Olympia Fields - WO 060

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

Attn: Mike Nelson

Jodie Bracken

Authorized for release by:
4/4/2014 11:01:34 AM
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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Visit us at: www.testamericainc.com

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-2

Client Sample ID: 2471-2-B06
Date Collected: 03/24/14 13:50
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-5
Matrix: Solid
Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.035	*	0.0047	0.0020	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Benzene	<0.0047		0.0047	0.00064	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Bromodichloromethane	<0.0047		0.0047	0.00081	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Bromoform	<0.0047		0.0047	0.0011	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Bromomethane	<0.0047	*	0.0047	0.0014	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
2-Butanone (MEK)	<0.0047		0.0047	0.0017	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Carbon disulfide	<0.0047		0.0047	0.00070	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Carbon tetrachloride	<0.0047	*	0.0047	0.00086	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Chlorobenzene	<0.0047		0.0047	0.00048	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Chloroethane	<0.0047	*	0.0047	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Chloroform	<0.0047		0.0047	0.00054	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Chloromethane	<0.0047		0.0047	0.00099	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
cis-1,2-Dichloroethene	<0.0047		0.0047	0.00067	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
cis-1,3-Dichloropropene	<0.0047		0.0047	0.00062	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Dibromochloromethane	<0.0047		0.0047	0.00082	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
1,1-Dichloroethane	<0.0047		0.0047	0.00074	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
1,2-Dichloroethane	<0.0047		0.0047	0.00070	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
1,1-Dichloroethene	<0.0047		0.0047	0.00076	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
1,2-Dichloropropane	<0.0047		0.0047	0.00071	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
1,3-Dichloropropene, Total	<0.0047		0.0047	0.00062	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Ethylbenzene	<0.0047		0.0047	0.00095	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
2-Hexanone	<0.0047		0.0047	0.0014	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Methylene Chloride	<0.0047		0.0047	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0012	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Methyl tert-butyl ether	<0.0047		0.0047	0.00078	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Styrene	<0.0047		0.0047	0.00062	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
1,1,2,2-Tetrachloroethane	<0.0047		0.0047	0.00095	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Tetrachloroethene	<0.0047		0.0047	0.00072	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Toluene	<0.0047		0.0047	0.00066	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
trans-1,2-Dichloroethene	<0.0047		0.0047	0.00065	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
trans-1,3-Dichloropropene	<0.0047		0.0047	0.00084	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
1,1,1-Trichloroethane	<0.0047		0.0047	0.00070	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
1,1,2-Trichloroethane	<0.0047		0.0047	0.00064	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Trichloroethene	<0.0047		0.0047	0.00078	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Vinyl acetate	<0.0047		0.0047	0.00074	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Vinyl chloride	<0.0047		0.0047	0.00099	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1
Xylenes, Total	<0.0094		0.0094	0.00043	mg/Kg	☼	03/25/14 07:20	03/27/14 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 122*	*03/25/14 07:20*	*03/27/14 17:35*	*1*
Dibromofluoromethane	*108*		*75 - 120*	*03/25/14 07:20*	*03/27/14 17:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 134*	*03/25/14 07:20*	*03/27/14 17:35*	*1*
Toluene-d8 (Surr)	*100*		*75 - 122*	*03/25/14 07:20*	*03/27/14 17:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.088	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1

Client Sample ID: 2471-2-B06
Date Collected: 03/24/14 13:50
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-5
Matrix: Solid
Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
2-Methylphenol	<0.20	*	0.20	0.063	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.048	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
2-Methylnaphthalene	**0.0095**	**J**	0.039	0.0073	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
4,6-Dinitro-2-methylphenol	<0.39		0.39	0.32	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-2

Client Sample ID: 2471-2-B06
Date Collected: 03/24/14 13:50
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-5
Matrix: Solid
Percent Solids: 82.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1
3 & 4 Methylphenol	<0.20	*	0.20	0.066	mg/Kg	☼	03/26/14 07:20	03/27/14 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*59*		*25 - 110*	*03/26/14 07:20*	*03/27/14 15:37*	*1*
Phenol-d5	*66*		*31 - 110*	*03/26/14 07:20*	*03/27/14 15:37*	*1*
Nitrobenzene-d5	*54*		*25 - 115*	*03/26/14 07:20*	*03/27/14 15:37*	*1*
2-Fluorobiphenyl	*64*		*25 - 119*	*03/26/14 07:20*	*03/27/14 15:37*	*1*
2,4,6-Tribromophenol	*73*		*35 - 137*	*03/26/14 07:20*	*03/27/14 15:37*	*1*
Terphenyl-d14	*87*		*36 - 134*	*03/26/14 07:20*	*03/27/14 15:37*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.48	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Arsenic	**5.1**		0.60	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Barium	**84**		0.60	0.065	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Beryllium	**0.73**		0.24	0.048	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Boron	**9.8**		3.0	0.60	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Cadmium	**0.20**	**B**	0.12	0.015	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Calcium	**14000**	**B**	12	3.3	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Chromium	**22**		0.60	0.070	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Cobalt	**7.9**		0.30	0.060	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Copper	**17**		0.60	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Iron	**20000**		12	5.0	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Lead	**9.8**		0.30	0.090	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Magnesium	**12000**	**B**	6.0	1.2	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Manganese	**210**		0.60	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Nickel	**27**		0.60	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Potassium	**2800**		30	1.8	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Selenium	<0.60		0.60	0.21	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Silver	<0.30		0.30	0.022	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Sodium	**2500**		60	8.1	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Thallium	<0.60		0.60	0.25	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Vanadium	**30**		0.30	0.045	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1
Zinc	**46**		1.2	0.24	mg/Kg	☼	03/25/14 16:00	03/26/14 17:24	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		04/02/14 09:00	04/02/14 18:34	1
Chromium	<0.025		0.025	0.010	mg/L		04/02/14 09:00	04/02/14 18:34	1
Iron	<0.20		0.20	0.20	mg/L		04/02/14 09:00	04/02/14 18:34	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-2

Client Sample ID: 2471-2-B06
Date Collected: 03/24/14 13:50
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0076		0.0075	0.0075	mg/L		04/02/14 09:00	04/02/14 18:34	1
Manganese	6.4		0.025	0.010	mg/L		04/02/14 09:00	04/02/14 18:34	1
Nickel	0.048		0.025	0.010	mg/L		04/02/14 09:00	04/02/14 18:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.61		0.50	0.050	mg/L		03/28/14 09:00	03/28/14 19:27	1
Beryllium	0.0056		0.0040	0.0040	mg/L		03/28/14 09:00	03/28/14 19:27	1
Boron	0.58		0.10	0.050	mg/L		03/28/14 09:00	03/28/14 19:27	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/28/14 09:00	03/28/14 19:27	1
Chromium	0.15		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:27	1
Cobalt	0.047		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:27	1
Iron	130	B	0.20	0.20	mg/L		03/28/14 09:00	03/28/14 19:27	1
Lead	0.067		0.0075	0.0075	mg/L		03/28/14 09:00	03/28/14 19:27	1
Manganese	1.1		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:27	1
Nickel	0.15		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:27	1
Selenium	<0.050		0.050	0.010	mg/L		03/28/14 09:00	03/28/14 19:27	1
Silver	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:27	1
Zinc	0.28	B	0.10	0.020	mg/L		03/28/14 09:00	03/28/14 19:27	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		03/28/14 09:00	03/31/14 18:18	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/28/14 09:00	03/31/14 18:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00022		0.00020	0.000020	mg/L		03/28/14 14:45	03/31/14 10:36	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.036		0.019	0.0076	mg/Kg	☼	03/25/14 15:00	03/26/14 11:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.09		0.200	0.200	SU			03/31/14 14:41	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

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

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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	Project	COC
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: Olympia Fields, Cook Co. Project No.: IDOT 2013-060 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** KAM, ZK	COC No.: 1 of 1 Lab Job No.: 500-73777 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

ANALYSES

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids	Waste Characterization					Comments
	~~2471-2-B01~~			S	X	X					X	X	X	X						
3	2471-2-B01-1		1:00																	0-5.5'
4	2471-2-B01-2		1:05																	5.5'-11'
	~~2471-2-B02~~																			
	~~2471-2-B03~~																			
	~~2471-2-B03 DUP~~																			
	~~2471-2-B04~~																			
	~~2471-2-B05~~																			
5	2471-2-B06		1:50																	0-4'
6	2471-2-B07-1		1:30																	0-5.5'
7	2471-2-B07-2		1:35	S	X	X					X	X	X	X						5.5'-11'

Relinquished by:	Date/Time	Received by:	Date/Time
Kim Alfano (AEI)	3/24/14 4:42	[signature]	3/24/14 1642

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

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

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

I. Source Location Information

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

Project Name: FAU 3778 (Crawford Ave at 203rd Street) Office Phone Number, if available: _____

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

20320 Crawford Ave

City: Olympia Fields State: IL Zip Code: 60443

County: Cook Township: Rich

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

Latitude: 41.52051 (Decimal Degrees) Longitude: -87.71335 (-Decimal Degrees)

Identify how the lat/long data were determined:

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

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

II. Owner/Operator Information for Source Site

Site Owner		Site Operator	
Name:	Illinois Department of Transportation	Name:	Illinois Department of Transportation
Street Address:	201 West Center Court	Street Address:	201 West Center Court
PO Box:		PO Box:	
City:	Schaumburg State: IL	City:	Schaumburg State: IL
Zip Code:	60196-1096 Phone: 847-705-4101	Zip Code:	60196-1096 Phone: 847-705-4101
Contact:	Sam Mead	Contact:	Sam Mead
Email, if available:	Sam.Mead@illinois.gov	Email, if available:	Sam.Mead@illinois.gov

Project Name: FAU 3778 (Crawford Ave at 203rd Street)

Latitude: 41.52051 Longitude: -87.71335

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 appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATION 2471-3-B01 WAS SAMPLED ADJACENT TO SITE 2471-3. SEE TABLE 3c AND FIGURE 2 OF THE REVISED 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 JOB ID NO.: 500-73777-3

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

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

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

Company Name: IDOT Bureau of Design and Environment

Street Address: 2300 South Dirksen Parkway

City: Springfield State: IL Zip Code: 62764

Phone: 217.785.4246

Steven Gobelman
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

6/3/14
Date:

STEVEN GOBELMAN
196-000598
LICENSED
PROFESSIONAL
GEOLOGIST
STATE OF ILLINOIS

P.E. and 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
m-Xylene
o-Xylene
p-Xylene
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3´-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo (a) anthracene
Benzo (a) pyrene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Semivolatile Organic Compounds (mg/kg) (cont.)
Benzo (b) fluoranthene
Benzo (g,h,i) perylene
Benzo (k) fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo (a,h) anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno (1,2,3-cd) pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Potassium
Selenium
Silver
Sodium
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 2471-3

Transitions Counseling Services

Sample ID	2471-3-B01-1	2471-3-B01-1 DUP	2471-3-B01-2	[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	[7] Most Stringent TACO Tier 1 Residential Objective
Sample Depth (ft)	0-5.5	0-5.5	5.5-11							
Sample Date	3/24/2014	3/24/2014	3/24/2014							
PID	0	0	0							
Sample pH	8	7.94	7.75							
Matrix	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: 500-73777-3
Client Project/Site: IDOT - Olympia Fields - WO 060

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

Attn: Mike Nelson

Jodie Bracken

Authorized for release by:
4/4/2014 11:02:10 AM
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: 2471-3-B01-1
Date Collected: 03/24/14 14:05
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-8
Matrix: Solid
Percent Solids: 79.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.011	*	0.0046	0.0020	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Benzene	<0.0046		0.0046	0.00063	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Bromodichloromethane	<0.0046		0.0046	0.00079	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Bromoform	<0.0046		0.0046	0.0011	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Bromomethane	<0.0046	*	0.0046	0.0014	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
2-Butanone (MEK)	<0.0046		0.0046	0.0017	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Carbon disulfide	<0.0046		0.0046	0.00068	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Carbon tetrachloride	<0.0046	*	0.0046	0.00083	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Chlorobenzene	<0.0046		0.0046	0.00046	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Chloroethane	<0.0046	*	0.0046	0.0012	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Chloroform	<0.0046		0.0046	0.00053	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Chloromethane	<0.0046		0.0046	0.00096	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
cis-1,2-Dichloroethene	<0.0046		0.0046	0.00065	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
cis-1,3-Dichloropropene	<0.0046		0.0046	0.00060	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Dibromochloromethane	<0.0046		0.0046	0.00079	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
1,1-Dichloroethane	<0.0046		0.0046	0.00072	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
1,2-Dichloroethane	<0.0046		0.0046	0.00068	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
1,1-Dichloroethene	<0.0046		0.0046	0.00074	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
1,2-Dichloropropane	<0.0046		0.0046	0.00069	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
1,3-Dichloropropene, Total	<0.0046		0.0046	0.00060	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Ethylbenzene	<0.0046		0.0046	0.00092	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
2-Hexanone	<0.0046		0.0046	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Methylene Chloride	<0.0046		0.0046	0.0012	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0012	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Methyl tert-butyl ether	<0.0046		0.0046	0.00075	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Styrene	<0.0046		0.0046	0.00060	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
1,1,2,2-Tetrachloroethane	<0.0046		0.0046	0.00092	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Tetrachloroethene	<0.0046		0.0046	0.00070	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Toluene	<0.0046		0.0046	0.00064	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
trans-1,2-Dichloroethene	<0.0046		0.0046	0.00063	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
trans-1,3-Dichloropropene	<0.0046		0.0046	0.00082	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
1,1,1-Trichloroethane	<0.0046		0.0046	0.00068	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
1,1,2-Trichloroethane	<0.0046		0.0046	0.00062	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Trichloroethene	<0.0046		0.0046	0.00075	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Vinyl acetate	<0.0046		0.0046	0.00072	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Vinyl chloride	<0.0046		0.0046	0.00096	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1
Xylenes, Total	<0.0091		0.0091	0.00041	mg/Kg	☼	03/25/14 07:20	03/27/14 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 122*	*03/25/14 07:20*	*03/27/14 18:44*	*1*
Dibromofluoromethane	*118*		*75 - 120*	*03/25/14 07:20*	*03/27/14 18:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*70 - 134*	*03/25/14 07:20*	*03/27/14 18:44*	*1*
Toluene-d8 (Surr)	*101*		*75 - 122*	*03/25/14 07:20*	*03/27/14 18:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21	*	0.21	0.093	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-3

Client Sample ID: 2471-3-B01-1
Date Collected: 03/24/14 14:05
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-8
Matrix: Solid
Percent Solids: 79.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
2-Methylphenol	<0.21	*	0.21	0.067	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
N-Nitrosodi-n-propylamine	<0.21		0.21	0.051	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
2-Methylnaphthalene	<0.041		0.041	0.0077	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
2-Nitrophenol	<0.41		0.41	0.099	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Fluorene	<0.041		0.041	0.0059	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
4,6-Dinitro-2-methylphenol	<0.41		0.41	0.34	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Phenanthrene	<0.041		0.041	0.0058	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Anthracene	<0.041		0.041	0.0070	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Fluoranthene	<0.041		0.041	0.0077	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Pyrene	<0.041		0.041	0.0083	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Benzo[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1

Client Sample ID: 2471-3-B01-1
Date Collected: 03/24/14 14:05
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-8
Matrix: Solid
Percent Solids: 79.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Benzo[b]fluoranthene	<0.041		0.041	0.0090	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Benzo[a]pyrene	<0.041		0.041	0.0081	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0081	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1
3 & 4 Methylphenol	<0.21	*	0.21	0.070	mg/Kg	☼	03/26/14 07:20	03/27/14 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*65*		*25 - 110*	*03/26/14 07:20*	*03/27/14 16:25*	*1*
Phenol-d5	*73*		*31 - 110*	*03/26/14 07:20*	*03/27/14 16:25*	*1*
Nitrobenzene-d5	*64*		*25 - 115*	*03/26/14 07:20*	*03/27/14 16:25*	*1*
2-Fluorobiphenyl	*71*		*25 - 119*	*03/26/14 07:20*	*03/27/14 16:25*	*1*
2,4,6-Tribromophenol	*72*		*35 - 137*	*03/26/14 07:20*	*03/27/14 16:25*	*1*
Terphenyl-d14	*91*		*36 - 134*	*03/26/14 07:20*	*03/27/14 16:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.49	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Arsenic	**8.9**		0.61	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Barium	**67**		0.61	0.065	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Beryllium	**0.60**		0.24	0.049	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Boron	**6.3**		3.0	0.61	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Cadmium	**0.15**	**B**	0.12	0.015	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Calcium	**1800**	**B**	12	3.3	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Chromium	**22**		0.61	0.071	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Cobalt	**7.9**		0.30	0.061	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Copper	**20**		0.61	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Iron	**22000**		12	5.0	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Lead	**19**		0.30	0.091	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Magnesium	**3900**	**B**	6.1	1.3	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Manganese	**300**		0.61	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Nickel	**20**		0.61	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Potassium	**2200**		30	1.8	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Selenium	**0.50**	**J**	0.61	0.22	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Silver	<0.30		0.30	0.022	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Sodium	**160**		61	8.2	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Thallium	**0.51**	**J**	0.61	0.26	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Vanadium	**31**		0.30	0.045	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	1
Zinc	**48**		1.2	0.25	mg/Kg	☼	03/25/14 16:00	03/26/14 17:43	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		04/02/14 09:00	04/02/14 18:53	1
Lead	<0.0075		0.0075	0.0075	mg/L		04/02/14 09:00	04/02/14 18:53	1
Manganese	**6.5**		0.025	0.010	mg/L		04/02/14 09:00	04/02/14 18:53	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-3

Client Sample ID: 2471-3-B01-1
Date Collected: 03/24/14 14:05
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.25	J	0.50	0.050	mg/L		03/28/14 09:00	03/28/14 19:45	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/28/14 09:00	03/28/14 19:45	1
Boron	0.88		0.10	0.050	mg/L		03/28/14 09:00	03/28/14 19:45	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/28/14 09:00	03/28/14 19:45	1
Chromium	0.012	J	0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:45	1
Cobalt	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:45	1
Iron	7.4	B	0.20	0.20	mg/L		03/28/14 09:00	03/28/14 19:45	1
Lead	0.0094		0.0075	0.0075	mg/L		03/28/14 09:00	03/28/14 19:45	1
Manganese	0.36		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:45	1
Nickel	0.010	J	0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:45	1
Selenium	<0.050		0.050	0.010	mg/L		03/28/14 09:00	03/28/14 19:45	1
Silver	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:45	1
Zinc	0.038	J B	0.10	0.020	mg/L		03/28/14 09:00	03/28/14 19:45	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		03/28/14 09:00	03/31/14 18:28	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/28/14 09:00	03/31/14 18:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000064	J	0.00020	0.000020	mg/L		03/28/14 14:45	03/31/14 10:46	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.019	J	0.021	0.0081	mg/Kg	☼	03/25/14 15:00	03/26/14 11:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.00		0.200	0.200	SU			03/31/14 14:56	1

Client Sample ID: 2471-3-B01-1 Dup
Date Collected: 03/24/14 14:10
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-9
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	**0.042**	*	0.0047	0.0020	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Benzene	<0.0047		0.0047	0.00064	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Bromodichloromethane	<0.0047		0.0047	0.00081	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Bromoform	<0.0047		0.0047	0.0011	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Bromomethane	<0.0047	*	0.0047	0.0014	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
2-Butanone (MEK)	**0.0053**		0.0047	0.0017	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Carbon disulfide	<0.0047		0.0047	0.00070	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Carbon tetrachloride	<0.0047	*	0.0047	0.00086	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Chlorobenzene	<0.0047		0.0047	0.00048	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Chloroethane	<0.0047	*	0.0047	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Chloroform	<0.0047		0.0047	0.00054	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Chloromethane	<0.0047		0.0047	0.00099	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
cis-1,2-Dichloroethene	<0.0047		0.0047	0.00067	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
cis-1,3-Dichloropropene	<0.0047		0.0047	0.00062	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Dibromochloromethane	<0.0047		0.0047	0.00082	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
1,1-Dichloroethane	<0.0047		0.0047	0.00074	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
1,2-Dichloroethane	<0.0047		0.0047	0.00070	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
1,1-Dichloroethene	<0.0047		0.0047	0.00076	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
1,2-Dichloropropane	<0.0047		0.0047	0.00071	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
1,3-Dichloropropene, Total	<0.0047		0.0047	0.00062	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Ethylbenzene	<0.0047		0.0047	0.00095	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
2-Hexanone	<0.0047		0.0047	0.0014	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Methylene Chloride	<0.0047		0.0047	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0012	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Methyl tert-butyl ether	<0.0047		0.0047	0.00078	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Styrene	<0.0047		0.0047	0.00062	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
1,1,2,2-Tetrachloroethane	<0.0047		0.0047	0.00095	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Tetrachloroethene	<0.0047		0.0047	0.00072	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Toluene	<0.0047		0.0047	0.00066	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
trans-1,2-Dichloroethene	<0.0047		0.0047	0.00065	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
trans-1,3-Dichloropropene	<0.0047		0.0047	0.00084	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
1,1,1-Trichloroethane	<0.0047		0.0047	0.00070	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
1,1,2-Trichloroethane	<0.0047		0.0047	0.00064	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Trichloroethene	<0.0047		0.0047	0.00078	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Vinyl acetate	<0.0047		0.0047	0.00074	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Vinyl chloride	<0.0047		0.0047	0.00099	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1
Xylenes, Total	<0.0094		0.0094	0.00043	mg/Kg	☼	03/25/14 07:20	03/27/14 19:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 122*	*03/25/14 07:20*	*03/27/14 19:07*	*1*
Dibromofluoromethane	*119*		*75 - 120*	*03/25/14 07:20*	*03/27/14 19:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 134*	*03/25/14 07:20*	*03/27/14 19:07*	*1*
Toluene-d8 (Surr)	*99*		*75 - 122*	*03/25/14 07:20*	*03/27/14 19:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.090	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-3

Client Sample ID: 2471-3-B01-1 Dup
Date Collected: 03/24/14 14:10
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-9
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
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
2-Methylphenol	<0.20	*	0.20	0.065	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.049	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
2,4-Dichlorophenol	<0.40		0.40	0.096	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
2,4,5-Trichlorophenol	<0.40		0.40	0.092	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
2-Methylnaphthalene	<0.040		0.040	0.0074	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
2,4-Dinitrophenol	<0.81		0.81	0.71	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Pentachlorophenol	<0.81		0.81	0.65	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
4,6-Dinitro-2-methylphenol	<0.40		0.40	0.32	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Fluoranthene	<0.040		0.040	0.0075	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1

Client Sample ID: 2471-3-B01-1 Dup
Date Collected: 03/24/14 14:10
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-9
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
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Benzo[b]fluoranthene	<0.040		0.040	0.0087	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Benzo[a]pyrene	<0.040		0.040	0.0078	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0078	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1
3 & 4 Methylphenol	<0.20	*	0.20	0.067	mg/Kg	☼	03/26/14 07:20	03/27/14 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*45*		*25 - 110*	*03/26/14 07:20*	*03/27/14 16:50*	*1*
Phenol-d5	*52*		*31 - 110*	*03/26/14 07:20*	*03/27/14 16:50*	*1*
Nitrobenzene-d5	*41*		*25 - 115*	*03/26/14 07:20*	*03/27/14 16:50*	*1*
2-Fluorobiphenyl	*46*		*25 - 119*	*03/26/14 07:20*	*03/27/14 16:50*	*1*
2,4,6-Tribromophenol	*62*		*35 - 137*	*03/26/14 07:20*	*03/27/14 16:50*	*1*
Terphenyl-d14	*77*		*36 - 134*	*03/26/14 07:20*	*03/27/14 16:50*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.50	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Arsenic	**7.4**		0.62	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Barium	**65**		0.62	0.066	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Beryllium	**0.74**		0.25	0.050	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Boron	**16**		3.1	0.62	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Cadmium	**0.50**	**B**	0.12	0.016	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Calcium	**54000**	**B**	12	3.4	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Chromium	**22**		0.62	0.072	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Cobalt	**11**		0.31	0.062	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Copper	**22**		0.62	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Iron	**21000**		12	5.1	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Lead	**11**		0.31	0.092	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Magnesium	**23000**	**B**	6.2	1.3	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Manganese	**350**		0.62	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Nickel	**27**		0.62	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Potassium	**4300**		31	1.9	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Selenium	<0.62		0.62	0.22	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Silver	<0.31		0.31	0.022	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Sodium	**870**		62	8.3	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Thallium	**0.32**	**J**	0.62	0.26	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Vanadium	**26**		0.31	0.046	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	1
Zinc	**42**		1.2	0.25	mg/Kg	☼	03/25/14 16:00	03/26/14 17:49	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		04/02/14 09:00	04/02/14 18:59	1
Manganese	**5.1**		0.025	0.010	mg/L		04/02/14 09:00	04/02/14 18:59	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-3

Client Sample ID: 2471-3-B01-1 Dup
Date Collected: 03/24/14 14:10
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-9
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.23**	**J**	0.50	0.050	mg/L		03/28/14 09:00	03/28/14 19:52	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/28/14 09:00	03/28/14 19:52	1
Boron	**0.89**		0.10	0.050	mg/L		03/28/14 09:00	03/28/14 19:52	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/28/14 09:00	03/28/14 19:52	1
Chromium	**0.010**	**J**	0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:52	1
Cobalt	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:52	1
Iron	**5.8**	**B**	0.20	0.20	mg/L		03/28/14 09:00	03/28/14 19:52	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/28/14 09:00	03/28/14 19:52	1
Manganese	**0.41**		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:52	1
Nickel	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:52	1
Selenium	<0.050		0.050	0.010	mg/L		03/28/14 09:00	03/28/14 19:52	1
Silver	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 19:52	1
Zinc	**0.037**	**J B**	0.10	0.020	mg/L		03/28/14 09:00	03/28/14 19:52	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		03/28/14 09:00	03/31/14 18:32	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/28/14 09:00	03/31/14 18:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		03/28/14 14:45	03/31/14 10:48	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.027**		0.020	0.0079	mg/Kg	☼	03/25/14 15:00	03/26/14 11:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.94**		0.200	0.200	SU			03/31/14 15:01	1

Client Sample ID: 2471-3-B01-2
Date Collected: 03/24/14 14:15
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-10
Matrix: Solid
Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0046	*	0.0046	0.0020	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Benzene	<0.0046		0.0046	0.00063	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Bromodichloromethane	<0.0046		0.0046	0.00079	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Bromoform	<0.0046		0.0046	0.0011	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Bromomethane	<0.0046	*	0.0046	0.0014	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
2-Butanone (MEK)	<0.0046		0.0046	0.0017	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Carbon disulfide	<0.0046		0.0046	0.00069	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Carbon tetrachloride	<0.0046	*	0.0046	0.00084	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Chlorobenzene	<0.0046		0.0046	0.00047	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Chloroethane	<0.0046	*	0.0046	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Chloroform	<0.0046		0.0046	0.00053	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Chloromethane	<0.0046		0.0046	0.00097	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
cis-1,2-Dichloroethene	<0.0046		0.0046	0.00065	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
cis-1,3-Dichloropropene	<0.0046		0.0046	0.00061	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Dibromochloromethane	<0.0046		0.0046	0.00080	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
1,1-Dichloroethane	<0.0046		0.0046	0.00073	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
1,2-Dichloroethane	<0.0046		0.0046	0.00068	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
1,1-Dichloroethene	<0.0046		0.0046	0.00075	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
1,2-Dichloropropane	<0.0046		0.0046	0.00070	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
1,3-Dichloropropene, Total	<0.0046		0.0046	0.00061	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Ethylbenzene	<0.0046		0.0046	0.00093	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
2-Hexanone	<0.0046		0.0046	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Methylene Chloride	<0.0046		0.0046	0.0012	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
4-Methyl-2-pentanone (MIBK)	<0.0046		0.0046	0.0012	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Methyl tert-butyl ether	<0.0046		0.0046	0.00076	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Styrene	<0.0046		0.0046	0.00061	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
1,1,2,2-Tetrachloroethane	<0.0046		0.0046	0.00093	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Tetrachloroethene	<0.0046		0.0046	0.00070	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Toluene	<0.0046		0.0046	0.00065	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
trans-1,2-Dichloroethene	<0.0046		0.0046	0.00063	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
trans-1,3-Dichloropropene	<0.0046		0.0046	0.00083	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
1,1,1-Trichloroethane	<0.0046		0.0046	0.00069	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
1,1,2-Trichloroethane	<0.0046		0.0046	0.00063	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Trichloroethene	<0.0046		0.0046	0.00076	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Vinyl acetate	<0.0046		0.0046	0.00073	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Vinyl chloride	<0.0046		0.0046	0.00097	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1
Xylenes, Total	<0.0092		0.0092	0.00042	mg/Kg	☼	03/25/14 07:20	03/27/14 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 122*	*03/25/14 07:20*	*03/27/14 19:30*	*1*
Dibromofluoromethane	*117*		*75 - 120*	*03/25/14 07:20*	*03/27/14 19:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 134*	*03/25/14 07:20*	*03/27/14 19:30*	*1*
Toluene-d8 (Surr)	*102*		*75 - 122*	*03/25/14 07:20*	*03/27/14 19:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.088	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-3

Client Sample ID: 2471-3-B01-2
Date Collected: 03/24/14 14:15
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-10
Matrix: Solid
Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
2-Methylphenol	<0.20	*	0.20	0.063	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.048	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Nitrobenzene	<0.039		0.039	0.0099	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Naphthalene	<0.039		0.039	0.0061	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
2,4-Dichlorophenol	<0.39		0.39	0.094	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
4-Chloroaniline	<0.80		0.80	0.19	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
2,4,6-Trichlorophenol	<0.39		0.39	0.14	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
2,4,5-Trichlorophenol	<0.39		0.39	0.090	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Hexachlorocyclopentadiene	<0.80		0.80	0.23	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
2-Methylnaphthalene	<0.039		0.039	0.0073	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
2,6-Dinitrotoluene	<0.20		0.20	0.078	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
2,4-Dinitrophenol	<0.80		0.80	0.70	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
2,4-Dinitrotoluene	<0.20		0.20	0.063	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Acenaphthene	<0.039		0.039	0.0071	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
4-Nitrophenol	<0.80		0.80	0.38	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Fluorene	<0.039		0.039	0.0056	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
4-Nitroaniline	<0.39		0.39	0.17	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Hexachlorobenzene	<0.080		0.080	0.0092	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Diethyl phthalate	<0.20		0.20	0.067	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Pentachlorophenol	<0.80		0.80	0.63	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
4,6-Dinitro-2-methylphenol	<0.39		0.39	0.32	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Anthracene	<0.039		0.039	0.0066	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Pyrene	<0.039		0.039	0.0079	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1

Client Sample ID: 2471-3-B01-2
Date Collected: 03/24/14 14:15
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-10
Matrix: Solid
Percent Solids: 81.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Benzo[a]pyrene	<0.039		0.039	0.0077	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1
3 & 4 Methylphenol	<0.20	*	0.20	0.066	mg/Kg	☼	03/26/14 07:20	03/27/14 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*46*		*25 - 110*	*03/26/14 07:20*	*03/27/14 17:14*	*1*
Phenol-d5	*55*		*31 - 110*	*03/26/14 07:20*	*03/27/14 17:14*	*1*
Nitrobenzene-d5	*43*		*25 - 115*	*03/26/14 07:20*	*03/27/14 17:14*	*1*
2-Fluorobiphenyl	*53*		*25 - 119*	*03/26/14 07:20*	*03/27/14 17:14*	*1*
2,4,6-Tribromophenol	*66*		*35 - 137*	*03/26/14 07:20*	*03/27/14 17:14*	*1*
Terphenyl-d14	*87*		*36 - 134*	*03/26/14 07:20*	*03/27/14 17:14*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.49	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Arsenic	**7.7**		0.60	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Barium	**97**		0.60	0.065	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Beryllium	**1.0**		0.24	0.048	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Boron	**10**		3.0	0.60	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Cadmium	**0.25**	**B**	0.12	0.015	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Calcium	**3400**	**B**	12	3.3	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Chromium	**25**		0.60	0.070	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Cobalt	**11**		0.30	0.060	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Copper	**22**		0.60	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Iron	**24000**		12	5.0	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Lead	**15**		0.30	0.090	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Magnesium	**5100**	**B**	6.0	1.2	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Manganese	**350**		0.60	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Nickel	**32**		0.60	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Potassium	**3100**		30	1.8	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Selenium	**0.29**	**J**	0.60	0.21	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Silver	<0.30		0.30	0.022	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Sodium	**790**		60	8.1	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Thallium	**0.27**	**J**	0.60	0.26	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Vanadium	**31**		0.30	0.045	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	1
Zinc	**41**		1.2	0.24	mg/Kg	☼	03/25/14 16:00	03/26/14 18:10	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		04/02/14 09:00	04/02/14 19:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		04/02/14 09:00	04/02/14 19:05	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-3

Client Sample ID: 2471-3-B01-2
Date Collected: 03/24/14 14:15
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-10
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.10**	**J**	0.50	0.050	mg/L		03/28/14 09:00	03/28/14 20:12	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/28/14 09:00	03/28/14 20:12	1
Boron	**0.87**		0.10	0.050	mg/L		03/28/14 09:00	03/28/14 20:12	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/28/14 09:00	03/28/14 20:12	1
Chromium	**0.022**	**J**	0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:12	1
Cobalt	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:12	1
Iron	**15**	**B**	0.20	0.20	mg/L		03/28/14 09:00	03/28/14 20:12	1
Lead	**0.0088**		0.0075	0.0075	mg/L		03/28/14 09:00	03/28/14 20:12	1
Manganese	**0.15**		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:12	1
Nickel	**0.017**	**J**	0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:12	1
Selenium	<0.050		0.050	0.010	mg/L		03/28/14 09:00	03/28/14 20:12	1
Silver	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:12	1
Zinc	**0.050**	**J B**	0.10	0.020	mg/L		03/28/14 09:00	03/28/14 20:12	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		03/28/14 09:00	03/31/14 18:42	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/28/14 09:00	03/31/14 18:42	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		03/28/14 14:45	03/31/14 10:50	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.024**		0.018	0.0071	mg/Kg	☼	03/25/14 15:00	03/26/14 11:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.75**		0.200	0.200	SU			03/31/14 15:06	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
X	Surrogate is outside control limits

Metals

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

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
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	Project	COC
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: Olympia Fields, Cook Co Project No.: IDOT 2013-060 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** KAM ZK	COC No.: 1 of 1 Lab Job No.: 500-73777 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

ANALYSES

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids	Waste Characterization					Comments
	~~2471-3-B01~~			~~S~~	X	X					X	X	X	X						
8	2471-3-B01-1	3/24/14	2:05	S	X	X					X	X	X	X						0-5.5'
9	2471-3-B01-1 DUP	3/24/14	2:10	S	X	X					X	X	X	X						0-5.5'
10	2471-3-B01-2	3/24/14	2:15	S	X	X					X	X	X	X						5.5'-11'

Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by: [signature]	3/24/14 4:42	Received by: [signature]	3/24/14 1642
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

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

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

I. Source Location Information

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

Project Name: FAU 3778 (Crawford Ave at 203rd Street) Office Phone Number, if available: _____

Physical Site Location (address, incldluding number and street):
20303 Crawford Avenue

City: Olympia Fields State: IL Zip Code: 60461

County: Cook Township: Rich

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

Latitude: 41.52020 (Decimal Degrees) Longitude: -87.71308 (-Decimal Degrees)

Identify how the lat/long data were determined:

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

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

II. Owner/Operator Information for Source Site

Site Owner		Site Operator	
Name:	Illinois Department of Transportation	Name:	Illinois Department of Transportation
Street Address:	201 West Center Court	Street Address:	201 West Center Court
PO Box:		PO Box:	
City:	Schaumburg State: IL	City:	Schaumburg State: IL
Zip Code:	60196-1096 Phone: 847-705-4101	Zip Code:	60196-1096 Phone: 847-705-4101
Contact:	Sam Mead	Contact:	Sam Mead
Email, if available:	Sam.Mead@illinois.gov	Email, if available:	Sam.Mead@illinois.gov

Project Name: FAU 3778 (Crawford Ave at 203rd Street)

Latitude: 41.52020 Longitude: -87.71308

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 appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATIONS 2471-4-B01 THROUGH -B03 WERE SAMPLED ADJACENT TO SITE 2471-4. SEE TABLE 3d AND FIGURE 2 OF THE REVISED 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 JOB ID NO.: 500-72414-3

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

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

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

Company Name: IDOT Bureau of Design and Environment

Street Address: 2300 South Dirksen Parkway

City: Springfield State: IL Zip Code: 62764

Phone: 217.785.4246

Steven Gobelman
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

6/3/14
Date:

STEVEN GOBELMAN
196-000598
LICENSED
PROFESSIONAL
GEOLOGIST
STATE OF ILLINOIS

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Semivolatile Organic Compounds (mg/kg) (cont.)
Benzo (b) fluoranthene
Benzo (g,h,i) perylene
Benzo (k) fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo (a,h) anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno (1,2,3-cd) pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Potassium
Selenium
Silver
Sodium
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 2471-4

Olympia Fields Professional Building

Sample ID	2471-4-B01		2471-4-B02		2471-4-B03-1		2471-4-B03-2		[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	[7] Most Stringent TACO Tier 1 Residential Objective
Sample Depth (ft)	0-4		0-4		0-5.5		5.5-11								
Sample Date	2/28/2014		2/28/2014		2/28/2014		2/28/2014								
PID	0		0		0		0								
Sample pH	8.55		7.85		8.12		8.05								
Matrix	Soil		Soil		Soil		Soil								
Semivolatile Organic Compounds (mg/kg)															
Benzo(a)pyrene	**J 0.012**		**0.53**	**1,2,***	ND		ND		0.09	0.09	0.98	1.3	2.1	NA	0.98

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: 500-72414-3
Client Project/Site: IDOT - Olympia Fields - WO 060

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

Attn: Mike Nelson

Authorized for release by:
3/18/2014 3:10:56 PM

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

LINKS

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Visit us at: www.testamericainc.com

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-3

Client Sample ID: 2471-4-B01
Date Collected: 02/28/14 09:35
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-8
Matrix: Solid
Percent Solids: 77.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0086		0.0064	0.0028	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Benzene	<0.0064		0.0064	0.00087	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Bromodichloromethane	<0.0064		0.0064	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Bromoform	<0.0064		0.0064	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Bromomethane	<0.0064		0.0064	0.0019	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
2-Butanone (MEK)	<0.0064		0.0064	0.0023	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Carbon disulfide	<0.0064		0.0064	0.00095	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Carbon tetrachloride	<0.0064		0.0064	0.0012	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Chlorobenzene	<0.0064		0.0064	0.00065	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Chloroethane	<0.0064	*	0.0064	0.0017	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Chloroform	<0.0064		0.0064	0.00073	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Chloromethane	<0.0064		0.0064	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
cis-1,2-Dichloroethene	<0.0064		0.0064	0.00090	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
cis-1,3-Dichloropropene	<0.0064		0.0064	0.00084	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Dibromochloromethane	<0.0064		0.0064	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
1,1-Dichloroethane	<0.0064		0.0064	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
1,2-Dichloroethane	<0.0064		0.0064	0.00094	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
1,1-Dichloroethene	<0.0064		0.0064	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
1,2-Dichloropropane	<0.0064		0.0064	0.00097	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
1,3-Dichloropropene, Total	<0.0064		0.0064	0.00084	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Ethylbenzene	<0.0064		0.0064	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
2-Hexanone	<0.0064		0.0064	0.0018	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Methylene Chloride	<0.0064		0.0064	0.0017	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
4-Methyl-2-pentanone (MIBK)	<0.0064		0.0064	0.0017	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Methyl tert-butyl ether	<0.0064		0.0064	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Styrene	<0.0064	*	0.0064	0.00084	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
1,1,2,2-Tetrachloroethane	<0.0064		0.0064	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Tetrachloroethene	<0.0064		0.0064	0.00097	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Toluene	<0.0064		0.0064	0.00089	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
trans-1,2-Dichloroethene	<0.0064		0.0064	0.00088	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
trans-1,3-Dichloropropene	<0.0064		0.0064	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
1,1,1-Trichloroethane	<0.0064		0.0064	0.00095	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
1,1,2-Trichloroethane	<0.0064		0.0064	0.00087	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Trichloroethene	<0.0064		0.0064	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Vinyl acetate	<0.0064		0.0064	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Vinyl chloride	<0.0064		0.0064	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1
Xylenes, Total	<0.013		0.013	0.00058	mg/Kg	☼	02/28/14 14:25	03/04/14 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 122*	*02/28/14 14:25*	*03/04/14 15:08*	*1*
Dibromofluoromethane	*107*		*75 - 120*	*02/28/14 14:25*	*03/04/14 15:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 134*	*02/28/14 14:25*	*03/04/14 15:08*	*1*
Toluene-d8 (Surr)	*103*		*75 - 122*	*02/28/14 14:25*	*03/04/14 15:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.092	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
1,3-Dichlorobenzene	<0.21		0.21	0.046	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-3

Client Sample ID: 2471-4-B01
Date Collected: 02/28/14 09:35
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-8
Matrix: Solid
Percent Solids: 77.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.049	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
2-Methylphenol	<0.21		0.21	0.066	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
N-Nitrosodi-n-propylamine	<0.21		0.21	0.050	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
2-Chlorophenol	<0.21		0.21	0.070	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.042	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.044	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Isophorone	<0.21		0.21	0.046	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Naphthalene	<0.041		0.041	0.0063	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
2,4-Dichlorophenol	<0.41		0.41	0.098	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
4-Chloroaniline	<0.83	*	0.83	0.19	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
2,4,5-Trichlorophenol	<0.41		0.41	0.094	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Hexachlorocyclopentadiene	<0.83		0.83	0.24	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
2-Methylnaphthalene	<0.041		0.041	0.0076	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
2,6-Dinitrotoluene	<0.21		0.21	0.081	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
2,4-Dinitrophenol	<0.83		0.83	0.73	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Acenaphthylene	<0.041		0.041	0.0054	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Acenaphthene	<0.041		0.041	0.0074	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Dibenzofuran	<0.21		0.21	0.048	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
4-Nitrophenol	<0.83		0.83	0.39	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Fluorene	<0.041		0.041	0.0058	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.054	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Hexachlorobenzene	<0.083		0.083	0.0096	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Diethyl phthalate	<0.21		0.21	0.070	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.048	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Pentachlorophenol	<0.83		0.83	0.66	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
4,6-Dinitro-2-methylphenol	<0.41		0.41	0.33	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Phenanthrene	**0.013**	**J**	0.041	0.0058	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Anthracene	<0.041		0.041	0.0069	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Carbazole	<0.21	*	0.21	0.11	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Fluoranthene	**0.031**	**J**	0.041	0.0077	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Pyrene	**0.023**	**J**	0.041	0.0082	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Benzo[a]anthracene	**0.015**	**J**	0.041	0.0056	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-3

Client Sample ID: 2471-4-B01
Date Collected: 02/28/14 09:35
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-8
Matrix: Solid
Percent Solids: 77.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.019**	**J**	0.041	0.011	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.075	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Di-n-octyl phthalate	<0.21		0.21	0.067	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Benzo[b]fluoranthene	**0.022**	**J**	0.041	0.0089	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Benzo[a]pyrene	**0.012**	**J**	0.041	0.0080	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Indeno[1,2,3-cd]pyrene	**0.013**	**J**	0.041	0.011	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
Benzo[g,h,i]perylene	**0.014**	**J**	0.041	0.013	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	03/06/14 06:51	03/06/14 23:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*76*		*25 - 110*	*03/06/14 06:51*	*03/06/14 23:16*	*1*
Phenol-d5	*89*		*31 - 110*	*03/06/14 06:51*	*03/06/14 23:16*	*1*
Nitrobenzene-d5	*70*		*25 - 115*	*03/06/14 06:51*	*03/06/14 23:16*	*1*
2-Fluorobiphenyl	*78*		*25 - 119*	*03/06/14 06:51*	*03/06/14 23:16*	*1*
2,4,6-Tribromophenol	*90*		*35 - 137*	*03/06/14 06:51*	*03/06/14 23:16*	*1*
Terphenyl-d14	*102*		*36 - 134*	*03/06/14 06:51*	*03/06/14 23:16*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.50	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Arsenic	**7.1**		0.62	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Barium	**97**		0.62	0.067	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Beryllium	**0.64**		0.25	0.050	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Boron	**5.6**		3.1	0.62	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Cadmium	**0.090**	**J**	0.12	0.016	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Calcium	**4700**	**B**	12	3.4	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Chromium	**19**		0.62	0.072	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Cobalt	**7.8**		0.31	0.062	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Copper	**15**		0.62	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Iron	**20000**		12	5.1	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Lead	**24**	**B**	0.31	0.093	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Magnesium	**4200**	**B**	6.2	1.3	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Manganese	**450**		0.62	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Nickel	**16**		0.62	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Potassium	**1800**		31	1.9	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Selenium	**0.80**		0.62	0.22	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Silver	<0.31		0.31	0.023	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Sodium	**150**		62	8.4	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Thallium	**0.71**		0.62	0.26	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Vanadium	**27**		0.31	0.046	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	1
Zinc	**52**		1.2	0.25	mg/Kg	☼	03/05/14 09:15	03/06/14 17:06	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		03/17/14 06:45	03/17/14 22:05	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/17/14 06:45	03/17/14 22:05	1
Manganese	**0.050**		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 22:05	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-3

Client Sample ID: 2471-4-B01
Date Collected: 02/28/14 09:35
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.33	J	0.50	0.050	mg/L		03/10/14 18:00	03/11/14 13:28	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/10/14 18:00	03/11/14 13:28	1
Boron	0.98	B	0.15	0.050	mg/L		03/10/14 18:00	03/11/14 13:28	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/10/14 18:00	03/11/14 13:28	1
Chromium	0.076		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:28	1
Cobalt	0.012	J	0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:28	1
Iron	62		0.20	0.20	mg/L		03/10/14 18:00	03/11/14 13:28	1
Lead	0.022		0.0075	0.0075	mg/L		03/10/14 18:00	03/11/14 13:28	1
Manganese	0.21		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:28	1
Nickel	0.053		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:28	1
Selenium	<0.050		0.050	0.010	mg/L		03/10/14 18:00	03/11/14 13:28	1
Silver	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:28	1
Zinc	0.16		0.10	0.020	mg/L		03/10/14 18:00	03/11/14 13:28	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		03/10/14 18:00	03/11/14 16:19	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/10/14 18:00	03/11/14 16:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000066	J	0.00020	0.000020	mg/L		03/10/14 17:00	03/11/14 12:18	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.019	0.0075	mg/Kg	☼	03/03/14 15:30	03/04/14 11:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.55		0.200	0.200	SU			03/04/14 13:28	1

Client Sample ID: 2471-4-B02
Date Collected: 02/28/14 09:40
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-9
Matrix: Solid
Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.025		0.0047	0.0020	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Benzene	<0.0047		0.0047	0.00064	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Bromodichloromethane	<0.0047		0.0047	0.00081	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Bromoform	<0.0047		0.0047	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Bromomethane	<0.0047		0.0047	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
2-Butanone (MEK)	<0.0047		0.0047	0.0017	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Carbon disulfide	<0.0047		0.0047	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Carbon tetrachloride	<0.0047		0.0047	0.00085	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Chlorobenzene	<0.0047		0.0047	0.00047	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Chloroethane	<0.0047	*	0.0047	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Chloroform	<0.0047		0.0047	0.00054	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Chloromethane	<0.0047		0.0047	0.00098	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
cis-1,2-Dichloroethene	<0.0047		0.0047	0.00066	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
cis-1,3-Dichloropropene	<0.0047		0.0047	0.00061	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Dibromochloromethane	<0.0047		0.0047	0.00081	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
1,1-Dichloroethane	<0.0047		0.0047	0.00074	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
1,2-Dichloroethane	<0.0047		0.0047	0.00069	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
1,1-Dichloroethene	<0.0047		0.0047	0.00076	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
1,2-Dichloropropane	<0.0047		0.0047	0.00071	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
1,3-Dichloropropene, Total	<0.0047		0.0047	0.00061	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Ethylbenzene	<0.0047		0.0047	0.00094	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
2-Hexanone	<0.0047		0.0047	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Methylene Chloride	<0.0047		0.0047	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0012	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Methyl tert-butyl ether	<0.0047		0.0047	0.00077	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Styrene	<0.0047	*	0.0047	0.00061	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
1,1,2,2-Tetrachloroethane	<0.0047		0.0047	0.00094	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Tetrachloroethene	<0.0047		0.0047	0.00071	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Toluene	<0.0047		0.0047	0.00065	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
trans-1,2-Dichloroethene	<0.0047		0.0047	0.00064	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
trans-1,3-Dichloropropene	<0.0047		0.0047	0.00084	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
1,1,1-Trichloroethane	<0.0047		0.0047	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
1,1,2-Trichloroethane	<0.0047		0.0047	0.00064	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Trichloroethene	<0.0047		0.0047	0.00077	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Vinyl acetate	<0.0047		0.0047	0.00074	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Vinyl chloride	<0.0047		0.0047	0.00098	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1
Xylenes, Total	<0.0094		0.0094	0.00042	mg/Kg	☼	02/28/14 14:25	03/04/14 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 122*	*02/28/14 14:25*	*03/04/14 15:31*	*1*
Dibromofluoromethane	*112*		*75 - 120*	*02/28/14 14:25*	*03/04/14 15:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*02/28/14 14:25*	*03/04/14 15:31*	*1*
Toluene-d8 (Surr)	*104*		*75 - 122*	*02/28/14 14:25*	*03/04/14 15:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-3

Client Sample ID: 2471-4-B02
Date Collected: 02/28/14 09:40
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-9
Matrix: Solid
Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
N-Nitrosodi-n-propylamine	<0.19		0.19	0.047	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Naphthalene	**0.040**		0.038	0.0059	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
2,4-Dichlorophenol	<0.38		0.38	0.092	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
4-Chloroaniline	<0.78	*	0.78	0.18	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
2,4,5-Trichlorophenol	<0.38		0.38	0.088	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
2-Methylnaphthalene	**0.017**	**J**	0.038	0.0071	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
2-Nitrophenol	<0.38		0.38	0.091	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Acenaphthylene	<0.038		0.038	0.0051	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Acenaphthene	**0.097**		0.038	0.0069	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Dibenzofuran	**0.060**	**J**	0.19	0.045	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Fluorene	**0.11**		0.038	0.0054	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
4,6-Dinitro-2-methylphenol	<0.38		0.38	0.31	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Phenanthrene	**0.90**		0.038	0.0054	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Anthracene	**0.25**		0.038	0.0065	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Carbazole	**0.15**	**J ***	0.19	0.10	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Fluoranthene	**1.2**		0.038	0.0072	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Pyrene	**1.6**		0.038	0.0077	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Benzo[a]anthracene	**0.60**		0.038	0.0052	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-3

Client Sample ID: 2471-4-B02
Date Collected: 02/28/14 09:40
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-9
Matrix: Solid
Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.60**		0.038	0.011	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Benzo[b]fluoranthene	**0.63**		0.038	0.0083	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Benzo[k]fluoranthene	**0.25**		0.038	0.011	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Benzo[a]pyrene	**0.53**		0.038	0.0075	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Indeno[1,2,3-cd]pyrene	**0.25**		0.038	0.010	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Dibenz(a,h)anthracene	**0.084**		0.038	0.0075	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
Benzo[g,h,i]perylene	**0.28**		0.038	0.012	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1
3 & 4 Methylphenol	<0.19		0.19	0.064	mg/Kg	☼	03/06/14 06:51	03/06/14 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*35*		*25 - 110*	*03/06/14 06:51*	*03/06/14 23:38*	*1*
Phenol-d5	*46*		*31 - 110*	*03/06/14 06:51*	*03/06/14 23:38*	*1*
Nitrobenzene-d5	*46*		*25 - 115*	*03/06/14 06:51*	*03/06/14 23:38*	*1*
2-Fluorobiphenyl	*56*		*25 - 119*	*03/06/14 06:51*	*03/06/14 23:38*	*1*
2,4,6-Tribromophenol	*70*		*35 - 137*	*03/06/14 06:51*	*03/06/14 23:38*	*1*
Terphenyl-d14	*92*		*36 - 134*	*03/06/14 06:51*	*03/06/14 23:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.45	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Arsenic	**5.1**		0.56	0.11	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Barium	**54**		0.56	0.060	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Beryllium	**0.38**		0.22	0.045	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Boron	**7.7**		2.8	0.56	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Cadmium	**0.34**		0.11	0.014	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Calcium	**99000**	**B**	110	30	mg/Kg	☼	03/05/14 09:15	03/07/14 11:08	10
Chromium	**12**		0.56	0.065	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Cobalt	**5.5**		0.28	0.056	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Copper	**13**		0.56	0.11	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Iron	**11000**		11	4.6	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Lead	**76**	**B**	0.28	0.083	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Magnesium	**65000**	**B**	56	12	mg/Kg	☼	03/05/14 09:15	03/07/14 11:08	10
Manganese	**340**		0.56	0.11	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Nickel	**9.8**		0.56	0.11	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Potassium	**1700**		28	1.7	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Selenium	<0.56		0.56	0.20	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Silver	<0.28		0.28	0.020	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Sodium	**2200**		56	7.5	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Thallium	**0.32**	**J**	0.56	0.24	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Vanadium	**16**		0.28	0.041	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1
Zinc	**44**		1.1	0.23	mg/Kg	☼	03/05/14 09:15	03/06/14 17:13	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/17/14 06:45	03/17/14 22:10	1
Chromium	<0.025		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 22:10	1
Iron	<0.20		0.20	0.20	mg/L		03/17/14 06:45	03/17/14 22:10	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-3

Client Sample ID: 2471-4-B02
Date Collected: 02/28/14 09:40
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-9
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		03/17/14 06:45	03/17/14 22:10	1
Manganese	**5.2**		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 22:10	1
Nickel	<0.025		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 22:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.73**		0.50	0.050	mg/L		03/10/14 18:00	03/11/14 13:35	1
Beryllium	**0.0065**		0.0040	0.0040	mg/L		03/10/14 18:00	03/11/14 13:35	1
Boron	**1.4**	**B**	0.15	0.050	mg/L		03/10/14 18:00	03/11/14 13:35	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/10/14 18:00	03/11/14 13:35	1
Chromium	**0.17**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:35	1
Cobalt	**0.055**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:35	1
Iron	**160**		0.20	0.20	mg/L		03/10/14 18:00	03/11/14 13:35	1
Lead	**0.40**		0.0075	0.0075	mg/L		03/10/14 18:00	03/11/14 13:35	1
Manganese	**1.8**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:35	1
Nickel	**0.15**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:35	1
Selenium	<0.050		0.050	0.010	mg/L		03/10/14 18:00	03/11/14 13:35	1
Silver	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:35	1
Zinc	**0.52**		0.10	0.020	mg/L		03/10/14 18:00	03/11/14 13:35	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		03/10/14 18:00	03/11/14 16:22	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/10/14 18:00	03/14/14 12:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00022**		0.00020	0.000020	mg/L		03/10/14 17:00	03/11/14 12:20	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.027**		0.019	0.0075	mg/Kg	☼	03/03/14 15:30	03/04/14 11:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**7.85**		0.200	0.200	SU			03/04/14 13:32	1

Client Sample ID: 2471-4-B03-1
Date Collected: 02/28/14 10:05
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-10
Matrix: Solid
Percent Solids: 78.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.014		0.0054	0.0023	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Benzene	<0.0054		0.0054	0.00073	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Bromodichloromethane	<0.0054		0.0054	0.00092	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Bromoform	<0.0054		0.0054	0.0012	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Bromomethane	<0.0054		0.0054	0.0016	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
2-Butanone (MEK)	<0.0054		0.0054	0.0019	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Carbon disulfide	<0.0054		0.0054	0.00080	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Carbon tetrachloride	<0.0054		0.0054	0.00098	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Chlorobenzene	<0.0054		0.0054	0.00054	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Chloroethane	<0.0054	*	0.0054	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Chloroform	<0.0054		0.0054	0.00062	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Chloromethane	<0.0054		0.0054	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
cis-1,2-Dichloroethene	<0.0054		0.0054	0.00076	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
cis-1,3-Dichloropropene	<0.0054		0.0054	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Dibromochloromethane	<0.0054		0.0054	0.00093	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
1,1-Dichloroethane	<0.0054		0.0054	0.00085	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
1,2-Dichloroethane	<0.0054		0.0054	0.00079	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
1,1-Dichloroethene	<0.0054		0.0054	0.00087	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
1,2-Dichloropropane	<0.0054		0.0054	0.00081	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
1,3-Dichloropropene, Total	<0.0054		0.0054	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Ethylbenzene	<0.0054		0.0054	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
2-Hexanone	<0.0054		0.0054	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Methylene Chloride	<0.0054		0.0054	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
4-Methyl-2-pentanone (MIBK)	<0.0054		0.0054	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Methyl tert-butyl ether	<0.0054		0.0054	0.00089	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Styrene	<0.0054	*	0.0054	0.00070	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
1,1,2,2-Tetrachloroethane	<0.0054		0.0054	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Tetrachloroethene	<0.0054		0.0054	0.00082	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Toluene	<0.0054		0.0054	0.00075	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
trans-1,2-Dichloroethene	<0.0054		0.0054	0.00074	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
trans-1,3-Dichloropropene	<0.0054		0.0054	0.00096	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
1,1,1-Trichloroethane	<0.0054		0.0054	0.00080	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
1,1,2-Trichloroethane	<0.0054		0.0054	0.00073	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Trichloroethene	<0.0054		0.0054	0.00088	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Vinyl acetate	<0.0054		0.0054	0.00084	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Vinyl chloride	<0.0054		0.0054	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1
Xylenes, Total	<0.011		0.011	0.00049	mg/Kg	☼	02/28/14 14:25	03/04/14 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 122*	*02/28/14 14:25*	*03/04/14 15:54*	*1*
Dibromofluoromethane	*112*		*75 - 120*	*02/28/14 14:25*	*03/04/14 15:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*70 - 134*	*02/28/14 14:25*	*03/04/14 15:54*	*1*
Toluene-d8 (Surr)	*107*		*75 - 122*	*02/28/14 14:25*	*03/04/14 15:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.093	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.063	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
1,4-Dichlorobenzene	<0.21		0.21	0.054	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-3

Client Sample ID: 2471-4-B03-1
Date Collected: 02/28/14 10:05
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-10
Matrix: Solid
Percent Solids: 78.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
N-Nitrosodi-n-propylamine	<0.21		0.21	0.051	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Hexachlorobutadiene	<0.21		0.21	0.066	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
4-Chloroaniline	<0.84	*	0.84	0.20	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
2-Methylnaphthalene	<0.041		0.041	0.0077	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
2-Nitrophenol	<0.41		0.41	0.099	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Dimethyl phthalate	<0.21		0.21	0.055	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Fluorene	<0.041		0.041	0.0059	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
4,6-Dinitro-2-methylphenol	<0.41		0.41	0.34	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Phenanthrene	<0.041		0.041	0.0058	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Anthracene	<0.041		0.041	0.0070	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Carbazole	<0.21	*	0.21	0.11	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Di-n-butyl phthalate	<0.21		0.21	0.064	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Fluoranthene	**0.0089**	**J**	0.041	0.0077	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Pyrene	<0.041		0.041	0.0083	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Benzo[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1

Client Sample ID: 2471-4-B03-1
Date Collected: 02/28/14 10:05
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-10
Matrix: Solid
Percent Solids: 78.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Benzo[b]fluoranthene	**0.0093**	**J**	0.041	0.0090	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Benzo[a]pyrene	<0.041		0.041	0.0081	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0081	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1
3 & 4 Methylphenol	<0.21		0.21	0.070	mg/Kg	☼	03/06/14 06:51	03/07/14 00:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*59*		*25 - 110*	*03/06/14 06:51*	*03/07/14 00:00*	*1*
Phenol-d5	*69*		*31 - 110*	*03/06/14 06:51*	*03/07/14 00:00*	*1*
Nitrobenzene-d5	*59*		*25 - 115*	*03/06/14 06:51*	*03/07/14 00:00*	*1*
2-Fluorobiphenyl	*64*		*25 - 119*	*03/06/14 06:51*	*03/07/14 00:00*	*1*
2,4,6-Tribromophenol	*89*		*35 - 137*	*03/06/14 06:51*	*03/07/14 00:00*	*1*
Terphenyl-d14	*108*		*36 - 134*	*03/06/14 06:51*	*03/07/14 00:00*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.48	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Arsenic	**4.4**		0.60	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Barium	**96**		0.60	0.064	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Beryllium	**0.63**		0.24	0.048	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Boron	**5.9**		3.0	0.60	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Cadmium	**0.055**	**J**	0.12	0.015	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Calcium	**3700**	**B**	12	3.3	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Chromium	**17**		0.60	0.070	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Cobalt	**6.1**		0.30	0.060	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Copper	**13**		0.60	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Iron	**16000**		12	4.9	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Lead	**10**	**B**	0.30	0.089	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Magnesium	**3200**	**B**	6.0	1.2	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Manganese	**370**		0.60	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Nickel	**15**		0.60	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Potassium	**1900**		30	1.8	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Selenium	**0.70**		0.60	0.21	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Silver	<0.30		0.30	0.022	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Sodium	**140**		60	8.0	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Thallium	**0.56**	**J**	0.60	0.25	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Vanadium	**23**		0.30	0.044	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	1
Zinc	**45**		1.2	0.24	mg/Kg	☼	03/05/14 09:15	03/06/14 17:19	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		03/17/14 06:45	03/17/14 22:23	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-3

Client Sample ID: 2471-4-B03-1
Date Collected: 02/28/14 10:05
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-10
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.15	J	0.50	0.050	mg/L		03/10/14 18:00	03/11/14 13:41	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/10/14 18:00	03/11/14 13:41	1
Boron	1.7	B	0.15	0.050	mg/L		03/10/14 18:00	03/11/14 13:41	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/10/14 18:00	03/11/14 13:41	1
Chromium	0.022	J	0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:41	1
Cobalt	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:41	1
Iron	11		0.20	0.20	mg/L		03/10/14 18:00	03/11/14 13:41	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/10/14 18:00	03/11/14 13:41	1
Manganese	0.056		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:41	1
Nickel	0.013	J	0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:41	1
Selenium	<0.050		0.050	0.010	mg/L		03/10/14 18:00	03/11/14 13:41	1
Silver	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:41	1
Zinc	0.078	J	0.10	0.020	mg/L		03/10/14 18:00	03/11/14 13:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/10/14 18:00	03/11/14 16:26	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/10/14 18:00	03/11/14 16:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		03/10/14 17:00	03/11/14 12:22	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.022		0.020	0.0078	mg/Kg	☼	03/03/14 15:30	03/04/14 11:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.12		0.200	0.200	SU			03/04/14 13:36	1

Client Sample ID: 2471-4-B03-2
Date Collected: 02/28/14 10:10
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-11
Matrix: Solid
Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0045		0.0045	0.0020	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Benzene	<0.0045		0.0045	0.00062	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Bromodichloromethane	<0.0045		0.0045	0.00078	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Bromoform	<0.0045		0.0045	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Bromomethane	<0.0045		0.0045	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
2-Butanone (MEK)	<0.0045		0.0045	0.0016	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Carbon disulfide	<0.0045		0.0045	0.00068	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Carbon tetrachloride	<0.0045		0.0045	0.00082	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Chlorobenzene	<0.0045		0.0045	0.00046	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Chloroethane	<0.0045	*	0.0045	0.0012	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Chloroform	<0.0045		0.0045	0.00052	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Chloromethane	<0.0045		0.0045	0.00095	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
cis-1,2-Dichloroethene	<0.0045		0.0045	0.00064	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
cis-1,3-Dichloropropene	<0.0045		0.0045	0.00059	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Dibromochloromethane	<0.0045		0.0045	0.00079	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
1,1-Dichloroethane	<0.0045		0.0045	0.00072	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
1,2-Dichloroethane	<0.0045		0.0045	0.00067	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
1,1-Dichloroethene	<0.0045		0.0045	0.00073	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
1,2-Dichloropropane	<0.0045		0.0045	0.00069	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
1,3-Dichloropropene, Total	<0.0045		0.0045	0.00059	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Ethylbenzene	<0.0045		0.0045	0.00091	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
2-Hexanone	<0.0045		0.0045	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Methylene Chloride	<0.0045		0.0045	0.0012	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
4-Methyl-2-pentanone (MIBK)	<0.0045		0.0045	0.0012	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Methyl tert-butyl ether	<0.0045		0.0045	0.00075	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Styrene	<0.0045	*	0.0045	0.00059	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
1,1,2,2-Tetrachloroethane	<0.0045		0.0045	0.00091	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Tetrachloroethene	<0.0045		0.0045	0.00069	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Toluene	<0.0045		0.0045	0.00063	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
trans-1,2-Dichloroethene	<0.0045		0.0045	0.00062	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
trans-1,3-Dichloropropene	<0.0045		0.0045	0.00081	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
1,1,1-Trichloroethane	<0.0045		0.0045	0.00068	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
1,1,2-Trichloroethane	<0.0045		0.0045	0.00062	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Trichloroethene	<0.0045		0.0045	0.00075	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Vinyl acetate	<0.0045		0.0045	0.00071	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Vinyl chloride	<0.0045		0.0045	0.00095	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1
Xylenes, Total	<0.0090		0.0090	0.00041	mg/Kg	☼	02/28/14 14:25	03/04/14 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 122*	*02/28/14 14:25*	*03/04/14 16:17*	*1*
Dibromofluoromethane	*107*		*75 - 120*	*02/28/14 14:25*	*03/04/14 16:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*70 - 134*	*02/28/14 14:25*	*03/04/14 16:17*	*1*
Toluene-d8 (Surr)	*105*		*75 - 122*	*02/28/14 14:25*	*03/04/14 16:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.084	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
1,3-Dichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
1,4-Dichlorobenzene	<0.19		0.19	0.048	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-3

Client Sample ID: 2471-4-B03-2
Date Collected: 02/28/14 10:10
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-11
Matrix: Solid
Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.045	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
2-Methylphenol	<0.19		0.19	0.061	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
N-Nitrosodi-n-propylamine	<0.19		0.19	0.046	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Hexachloroethane	<0.19		0.19	0.057	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
2-Chlorophenol	<0.19		0.19	0.064	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Nitrobenzene	<0.037		0.037	0.0094	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.038	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Isophorone	<0.19		0.19	0.042	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Hexachlorobutadiene	<0.19		0.19	0.059	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Naphthalene	<0.037		0.037	0.0058	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
2,4-Dichlorophenol	<0.37		0.37	0.090	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
4-Chloroaniline	<0.76	*	0.76	0.18	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
2,4,5-Trichlorophenol	<0.37		0.37	0.086	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Hexachlorocyclopentadiene	<0.76		0.76	0.22	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
2-Methylnaphthalene	<0.037		0.037	0.0069	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
2-Nitroaniline	<0.19		0.19	0.051	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
2,6-Dinitrotoluene	<0.19		0.19	0.074	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
2-Nitrophenol	<0.37		0.37	0.089	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
3-Nitroaniline	<0.37		0.37	0.12	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Dimethyl phthalate	<0.19		0.19	0.049	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
2,4-Dinitrophenol	<0.76		0.76	0.66	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Acenaphthylene	<0.037		0.037	0.0050	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
2,4-Dinitrotoluene	<0.19		0.19	0.060	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Acenaphthene	<0.037		0.037	0.0068	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Dibenzofuran	<0.19		0.19	0.044	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
4-Nitrophenol	<0.76		0.76	0.36	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Fluorene	<0.037		0.037	0.0053	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
4-Nitroaniline	<0.37		0.37	0.16	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Hexachlorobenzene	<0.076		0.076	0.0087	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Diethyl phthalate	<0.19		0.19	0.064	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.044	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Pentachlorophenol	<0.76		0.76	0.61	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
4,6-Dinitro-2-methylphenol	<0.37		0.37	0.30	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Phenanthrene	<0.037		0.037	0.0053	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Anthracene	<0.037		0.037	0.0063	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Carbazole	<0.19	*	0.19	0.097	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Di-n-butyl phthalate	<0.19		0.19	0.057	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Fluoranthene	<0.037		0.037	0.0070	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Pyrene	<0.037		0.037	0.0075	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Butyl benzyl phthalate	<0.19		0.19	0.072	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Benzo[a]anthracene	<0.037		0.037	0.0051	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-3

Client Sample ID: 2471-4-B03-2
Date Collected: 02/28/14 10:10
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-11
Matrix: Solid
Percent Solids: 82.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.037		0.037	0.010	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.053	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.069	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Benzo[b]fluoranthene	<0.037		0.037	0.0081	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Benzo[k]fluoranthene	<0.037		0.037	0.011	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Benzo[a]pyrene	<0.037		0.037	0.0073	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Indeno[1,2,3-cd]pyrene	<0.037		0.037	0.0098	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Dibenz(a,h)anthracene	<0.037		0.037	0.0073	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
Benzo[g,h,i]perylene	<0.037		0.037	0.012	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1
3 & 4 Methylphenol	<0.19		0.19	0.063	mg/Kg	☼	03/06/14 06:51	03/07/14 00:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*62*		*25 - 110*	*03/06/14 06:51*	*03/07/14 00:21*	*1*
Phenol-d5	*74*		*31 - 110*	*03/06/14 06:51*	*03/07/14 00:21*	*1*
Nitrobenzene-d5	*65*		*25 - 115*	*03/06/14 06:51*	*03/07/14 00:21*	*1*
2-Fluorobiphenyl	*71*		*25 - 119*	*03/06/14 06:51*	*03/07/14 00:21*	*1*
2,4,6-Tribromophenol	*86*		*35 - 137*	*03/06/14 06:51*	*03/07/14 00:21*	*1*
Terphenyl-d14	*116*		*36 - 134*	*03/06/14 06:51*	*03/07/14 00:21*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.44	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Arsenic	**5.0**		0.55	0.11	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Barium	**47**		0.55	0.059	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Beryllium	**0.49**		0.22	0.044	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Boron	**8.8**		2.8	0.55	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Cadmium	**0.17**		0.11	0.014	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Calcium	**49000**	**B**	11	3.0	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Chromium	**16**		0.55	0.064	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Cobalt	**8.7**		0.28	0.055	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Copper	**14**		0.55	0.11	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Iron	**15000**		11	4.5	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Lead	**6.3**	**B**	0.28	0.082	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Magnesium	**20000**	**B**	5.5	1.1	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Manganese	**300**		0.55	0.11	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Nickel	**19**		0.55	0.11	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Potassium	**2300**		28	1.7	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Selenium	<0.55		0.55	0.20	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Silver	<0.28		0.28	0.020	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Sodium	**190**		55	7.4	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Thallium	**0.43**	**J**	0.55	0.23	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Vanadium	**19**		0.28	0.041	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	1
Zinc	**29**		1.1	0.22	mg/Kg	☼	03/05/14 09:15	03/06/14 17:25	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		03/17/14 06:45	03/17/14 22:29	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-3

Client Sample ID: 2471-4-B03-2
Date Collected: 02/28/14 10:10
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.099	J	0.50	0.050	mg/L		03/10/14 18:00	03/11/14 13:48	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/10/14 18:00	03/11/14 13:48	1
Boron	1.3	B	0.15	0.050	mg/L		03/10/14 18:00	03/11/14 13:48	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/10/14 18:00	03/11/14 13:48	1
Chromium	0.022	J	0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:48	1
Cobalt	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:48	1
Iron	12		0.20	0.20	mg/L		03/10/14 18:00	03/11/14 13:48	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/10/14 18:00	03/11/14 13:48	1
Manganese	0.082		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:48	1
Nickel	0.015	J	0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:48	1
Selenium	<0.050		0.050	0.010	mg/L		03/10/14 18:00	03/11/14 13:48	1
Silver	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 13:48	1
Zinc	0.074	J	0.10	0.020	mg/L		03/10/14 18:00	03/11/14 13:48	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		03/10/14 18:00	03/11/14 16:29	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/10/14 18:00	03/11/14 16:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		03/10/14 17:00	03/11/14 12:24	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.025		0.018	0.0069	mg/Kg	☼	03/03/14 15:30	03/04/14 11:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.05		0.200	0.200	SU			03/04/14 13:40	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

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

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
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	Project Name: Olympia Fields, Cook Co.	COC No.: 1 of 1
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 No.: IDOT 2013-060 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** KAM / ZK (AEI)	Lab Job No.: 500-72414 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
8	2471-4-B01	2/28/14	9:35	S	X	X					X	X	X	X						0-4'
9	2471-4-B02	2/28/14	9:40	S	X	X					X	X	X	X						0-4'
10	2471-4-B03-1	2/28/14	10:05	S	X	X					X	X	X	X						0-5.5'
11	2471-4-B03-2	2/28/14	10:10	S	X	X					X	X	X	X						5.5'-11'

Relinquished by:	Date/Time	Received by:	Date/Time
Kelly A. Ulmer (AEI)	2/28/14 12:44	[illegible]	2/28/14 1244
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Illinois Environmental Protection Agency

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

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

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

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

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

I. Source Location Information

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

Project Name: FAU 3778 (Crawford Ave at 203rd Street) Office Phone Number, if available: _____

Physical Site Location (address, inclduding number and street):
20330-20348 Crawford Avenue

City: Olympia Fields State: IL Zip Code: 60443

County: Cook Township: Rich

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

Latitude: 41.51960 (Decimal Degrees) Longitude: -87.71337 (-Decimal Degrees)

Identify how the lat/long data were determined:

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

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

II. Owner/Operator Information for Source Site

Site Owner		Site Operator	
Name:	Illinois Department of Transportation	Name:	Illinois Department of Transportation
Street Address:	201 West Center Court	Street Address:	201 West Center Court
PO Box:		PO Box:	
City:	Schaumburg State: IL	City:	Schaumburg State: IL
Zip Code:	60196-1096 Phone: 847-705-4101	Zip Code:	60196-1096 Phone: 847-705-4101
Contact:	Sam Mead	Contact:	Sam Mead
Email, if available:	Sam.Mead@illinois.gov	Email, if available:	Sam.Mead@illinois.gov

Project Name: FAU 3778 (Crawford Ave at 203rd Street)

Latitude: 41.51960 Longitude: -87.71337

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 appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATIONS 2471-5-B01 THROUGH -B03 WERE SAMPLED ADJACENT TO SITE 2471-5. SEE TABLE 3e AND FIGURE 2 OF THE REVISED 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 JOB ID NO.: 500-73777-4

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

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

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

Company Name: IDOT Bureau of Design and Environment

Street Address: 2300 South Dirksen Parkway

City: Springfield State: IL Zip Code: 62764

Phone: 217.785.4246

Steven Gobelman
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

6/3/14
Date:

STEVEN GOBELMAN
196-000598
LICENSED
PROFESSIONAL
GEOLOGIST
STATE OF ILLINOIS

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Semivolatile Organic Compounds (mg/kg) (cont.)
Benzo (b) fluoranthene
Benzo (g,h,i) perylene
Benzo (k) fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo (a,h) anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno (1,2,3-cd) pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Potassium
Selenium
Silver
Sodium
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 2471-5

Residences

Sample ID	2471-5-B01	2471-5-B02	2471-5-B03	2471-5-B03 DUP	[1] Most Stringent MAC	[2] Outside a Populated Area MAC	[3] Populated non-Metropolitan Statistical Area MAC	[4] Within Chicago Corporate Limits MAC	[5] Metropolitan Statistical Area MAC	[6] Class I Soil TCLP/SPLP Comparisons Only	[7] Most Stringent TACO Tier 1 Residential Objective
Sample Depth (ft)	0-5	0-5	0-5	0-5							
Sample Date	3/24/2014	3/24/2014	3/24/2014	3/24/2014							
PID	0	0	0	0							
Sample pH	8.06	8.02	8.2	8.24							
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: 500-73777-4
Client Project/Site: IDOT - Olympia Fields - WO 060

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

Attn: Mike Nelson

Jodie Bracken

Authorized for release by:
4/4/2014 11:02:55 AM
Jodie Bracken, Project Management Assistant II
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Designee for

Richard Wright, Senior Project Manager
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LINKS

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Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-4

Client Sample ID: 2471-5-B01
Date Collected: 03/24/14 15:00
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-11
Matrix: Solid
Percent Solids: 78.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.014	*	0.0048	0.0021	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Benzene	<0.0048		0.0048	0.00066	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Bromodichloromethane	<0.0048		0.0048	0.00083	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Bromoform	<0.0048		0.0048	0.0011	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Bromomethane	<0.0048	*	0.0048	0.0015	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
2-Butanone (MEK)	<0.0048		0.0048	0.0018	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Carbon disulfide	<0.0048		0.0048	0.00072	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Carbon tetrachloride	<0.0048	*	0.0048	0.00088	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Chlorobenzene	<0.0048		0.0048	0.00049	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Chloroethane	<0.0048	*	0.0048	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Chloroform	<0.0048		0.0048	0.00056	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Chloromethane	<0.0048		0.0048	0.0010	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
cis-1,2-Dichloroethene	<0.0048		0.0048	0.00068	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
cis-1,3-Dichloropropene	<0.0048		0.0048	0.00063	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Dibromochloromethane	<0.0048		0.0048	0.00084	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
1,1-Dichloroethane	<0.0048		0.0048	0.00077	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
1,2-Dichloroethane	<0.0048		0.0048	0.00072	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
1,1-Dichloroethene	<0.0048		0.0048	0.00078	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
1,2-Dichloropropane	<0.0048		0.0048	0.00073	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
1,3-Dichloropropene, Total	<0.0048		0.0048	0.00063	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Ethylbenzene	<0.0048		0.0048	0.00098	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
2-Hexanone	<0.0048		0.0048	0.0014	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Methylene Chloride	<0.0048		0.0048	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
4-Methyl-2-pentanone (MIBK)	<0.0048		0.0048	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Methyl tert-butyl ether	<0.0048		0.0048	0.00080	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Styrene	<0.0048		0.0048	0.00063	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
1,1,2,2-Tetrachloroethane	<0.0048		0.0048	0.00098	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Tetrachloroethene	<0.0048		0.0048	0.00074	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Toluene	<0.0048		0.0048	0.00068	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
trans-1,2-Dichloroethene	<0.0048		0.0048	0.00067	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
trans-1,3-Dichloropropene	<0.0048		0.0048	0.00087	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
1,1,1-Trichloroethane	<0.0048		0.0048	0.00072	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
1,1,2-Trichloroethane	<0.0048		0.0048	0.00066	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Trichloroethene	<0.0048		0.0048	0.00080	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Vinyl acetate	<0.0048		0.0048	0.00076	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Vinyl chloride	<0.0048		0.0048	0.0010	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1
Xylenes, Total	<0.0097		0.0097	0.00044	mg/Kg	☼	03/25/14 07:20	03/27/14 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 122*	*03/25/14 07:20*	*03/27/14 19:53*	*1*
Dibromofluoromethane	*115*		*75 - 120*	*03/25/14 07:20*	*03/27/14 19:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*108*		*70 - 134*	*03/25/14 07:20*	*03/27/14 19:53*	*1*
Toluene-d8 (Surr)	*96*		*75 - 122*	*03/25/14 07:20*	*03/27/14 19:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.089	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.060	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
1,3-Dichlorobenzene	<0.20		0.20	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
1,4-Dichlorobenzene	<0.20		0.20	0.051	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-4

Client Sample ID: 2471-5-B01
Date Collected: 03/24/14 15:00
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-11
Matrix: Solid
Percent Solids: 78.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.048	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
2-Methylphenol	<0.20	*	0.20	0.064	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.049	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Hexachloroethane	<0.20		0.20	0.061	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
2-Chlorophenol	<0.20		0.20	0.068	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.041	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Isophorone	<0.20		0.20	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Hexachlorobutadiene	<0.20		0.20	0.063	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Naphthalene	<0.040		0.040	0.0062	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
2,4-Dichlorophenol	<0.40		0.40	0.095	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
4-Chloroaniline	<0.81		0.81	0.19	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
2,4,5-Trichlorophenol	<0.40		0.40	0.091	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Hexachlorocyclopentadiene	<0.81		0.81	0.23	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
2-Methylnaphthalene	<0.040		0.040	0.0074	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
2-Nitroaniline	<0.20		0.20	0.054	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
2-Chloronaphthalene	<0.20		0.20	0.044	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
2,6-Dinitrotoluene	<0.20		0.20	0.079	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
2-Nitrophenol	<0.40		0.40	0.095	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
3-Nitroaniline	<0.40		0.40	0.12	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Dimethyl phthalate	<0.20		0.20	0.052	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
2,4-Dinitrophenol	<0.81		0.81	0.70	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Acenaphthylene	<0.040		0.040	0.0053	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
2,4-Dinitrotoluene	<0.20		0.20	0.064	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Acenaphthene	<0.040		0.040	0.0072	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Dibenzofuran	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
4-Nitrophenol	<0.81		0.81	0.38	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Fluorene	<0.040		0.040	0.0056	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.053	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Hexachlorobenzene	<0.081		0.081	0.0093	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Diethyl phthalate	<0.20		0.20	0.068	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Pentachlorophenol	<0.81		0.81	0.64	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
N-Nitrosodiphenylamine	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
4,6-Dinitro-2-methylphenol	<0.40		0.40	0.32	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Phenanthrene	<0.040		0.040	0.0056	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Anthracene	<0.040		0.040	0.0067	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Di-n-butyl phthalate	<0.20		0.20	0.061	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Fluoranthene	<0.040		0.040	0.0074	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Pyrene	<0.040		0.040	0.0080	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Butyl benzyl phthalate	<0.20		0.20	0.076	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Benzo[a]anthracene	<0.040		0.040	0.0054	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1

Client Sample ID: 2471-5-B01
Date Collected: 03/24/14 15:00
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-11
Matrix: Solid
Percent Solids: 78.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.040		0.040	0.011	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.056	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.073	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Di-n-octyl phthalate	<0.20		0.20	0.065	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Benzo[b]fluoranthene	<0.040		0.040	0.0086	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Benzo[a]pyrene	<0.040		0.040	0.0077	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.010	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0077	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
Benzo[g,h,i]perylene	<0.040		0.040	0.013	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1
3 & 4 Methylphenol	<0.20	*	0.20	0.067	mg/Kg	☼	03/26/14 07:20	03/27/14 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*47*		*25 - 110*	*03/26/14 07:20*	*03/27/14 17:38*	*1*
Phenol-d5	*54*		*31 - 110*	*03/26/14 07:20*	*03/27/14 17:38*	*1*
Nitrobenzene-d5	*40*		*25 - 115*	*03/26/14 07:20*	*03/27/14 17:38*	*1*
2-Fluorobiphenyl	*47*		*25 - 119*	*03/26/14 07:20*	*03/27/14 17:38*	*1*
2,4,6-Tribromophenol	*60*		*35 - 137*	*03/26/14 07:20*	*03/27/14 17:38*	*1*
Terphenyl-d14	*78*		*36 - 134*	*03/26/14 07:20*	*03/27/14 17:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.48	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Arsenic	**8.0**		0.60	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Barium	**57**		0.60	0.064	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Beryllium	**0.63**		0.24	0.048	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Boron	**13**		3.0	0.60	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Cadmium	**0.49**	**B**	0.12	0.015	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Calcium	**50000**	**B**	12	3.3	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Chromium	**18**		0.60	0.070	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Cobalt	**10**		0.30	0.060	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Copper	**24**		0.60	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Iron	**19000**		12	4.9	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Lead	**12**		0.30	0.090	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Magnesium	**25000**	**B**	6.0	1.2	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Manganese	**370**		0.60	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Nickel	**24**		0.60	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Potassium	**3400**		30	1.8	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Selenium	<0.60		0.60	0.21	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Silver	<0.30		0.30	0.022	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Sodium	**300**		60	8.1	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Thallium	**0.49**	**J**	0.60	0.25	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Vanadium	**22**		0.30	0.045	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	1
Zinc	**39**		1.2	0.24	mg/Kg	☼	03/25/14 16:00	03/26/14 18:16	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		04/02/14 09:00	04/02/14 19:12	1
Lead	<0.0075		0.0075	0.0075	mg/L		04/02/14 09:00	04/02/14 19:12	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-4

Client Sample ID: 2471-5-B01
Date Collected: 03/24/14 15:00
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.18	J	0.50	0.050	mg/L		03/28/14 09:00	03/28/14 20:19	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/28/14 09:00	03/28/14 20:19	1
Boron	1.0		0.10	0.050	mg/L		03/28/14 09:00	03/28/14 20:19	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/28/14 09:00	03/28/14 20:19	1
Chromium	0.013	J	0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:19	1
Cobalt	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:19	1
Iron	12	B	0.20	0.20	mg/L		03/28/14 09:00	03/28/14 20:19	1
Lead	0.0099		0.0075	0.0075	mg/L		03/28/14 09:00	03/28/14 20:19	1
Manganese	0.092		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:19	1
Nickel	0.014	J	0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:19	1
Selenium	<0.050		0.050	0.010	mg/L		03/28/14 09:00	03/28/14 20:19	1
Silver	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:19	1
Zinc	0.050	J B	0.10	0.020	mg/L		03/28/14 09:00	03/28/14 20:19	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		03/28/14 09:00	03/31/14 18:46	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/28/14 09:00	03/31/14 18:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000095	J	0.00020	0.000020	mg/L		03/28/14 14:45	03/31/14 10:51	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035		0.021	0.0083	mg/Kg	☼	03/25/14 15:00	03/26/14 11:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.06		0.200	0.200	SU			03/31/14 15:11	1

Client Sample ID: 2471-5-B02
Date Collected: 03/24/14 14:50
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-12
Matrix: Solid
Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0055	*	0.0047	0.0020	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Benzene	<0.0047		0.0047	0.00064	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Bromodichloromethane	<0.0047		0.0047	0.00080	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Bromoform	<0.0047		0.0047	0.0011	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Bromomethane	<0.0047	*	0.0047	0.0014	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
2-Butanone (MEK)	<0.0047		0.0047	0.0017	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Carbon disulfide	<0.0047		0.0047	0.00070	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Carbon tetrachloride	<0.0047	*	0.0047	0.00085	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Chlorobenzene	<0.0047		0.0047	0.00047	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Chloroethane	<0.0047	*	0.0047	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Chloroform	<0.0047		0.0047	0.00054	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Chloromethane	<0.0047		0.0047	0.00098	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
cis-1,2-Dichloroethene	<0.0047		0.0047	0.00066	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
cis-1,3-Dichloropropene	<0.0047		0.0047	0.00061	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Dibromochloromethane	<0.0047		0.0047	0.00081	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
1,1-Dichloroethane	<0.0047		0.0047	0.00074	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
1,2-Dichloroethane	<0.0047		0.0047	0.00069	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
1,1-Dichloroethene	<0.0047		0.0047	0.00075	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
1,2-Dichloropropane	<0.0047		0.0047	0.00071	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
1,3-Dichloropropene, Total	<0.0047		0.0047	0.00061	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Ethylbenzene	<0.0047		0.0047	0.00094	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
2-Hexanone	<0.0047		0.0047	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Methylene Chloride	<0.0047		0.0047	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0012	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Methyl tert-butyl ether	<0.0047		0.0047	0.00077	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Styrene	<0.0047		0.0047	0.00061	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
1,1,2,2-Tetrachloroethane	<0.0047		0.0047	0.00094	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Tetrachloroethene	<0.0047		0.0047	0.00071	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Toluene	<0.0047		0.0047	0.00065	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
trans-1,2-Dichloroethene	<0.0047		0.0047	0.00064	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
trans-1,3-Dichloropropene	<0.0047		0.0047	0.00084	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
1,1,1-Trichloroethane	<0.0047		0.0047	0.00070	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
1,1,2-Trichloroethane	<0.0047		0.0047	0.00064	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Trichloroethene	<0.0047		0.0047	0.00077	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Vinyl acetate	<0.0047		0.0047	0.00073	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Vinyl chloride	<0.0047		0.0047	0.00098	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1
Xylenes, Total	<0.0093		0.0093	0.00042	mg/Kg	☼	03/25/14 07:20	03/27/14 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 122*	*03/25/14 07:20*	*03/27/14 20:15*	*1*
Dibromofluoromethane	*112*		*75 - 120*	*03/25/14 07:20*	*03/27/14 20:15*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 134*	*03/25/14 07:20*	*03/27/14 20:15*	*1*
Toluene-d8 (Surr)	*102*		*75 - 122*	*03/25/14 07:20*	*03/27/14 20:15*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19	*	0.19	0.085	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.057	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
1,3-Dichlorobenzene	<0.19		0.19	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
1,4-Dichlorobenzene	<0.19		0.19	0.049	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-4

Client Sample ID: 2471-5-B02
Date Collected: 03/24/14 14:50
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-12
Matrix: Solid
Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
2-Methylphenol	<0.19	*	0.19	0.061	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.044	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
N-Nitrosodi-n-propylamine	<0.19		0.19	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Hexachloroethane	<0.19		0.19	0.058	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
2-Chlorophenol	<0.19		0.19	0.065	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Nitrobenzene	<0.038		0.038	0.0096	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.039	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.041	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Isophorone	<0.19		0.19	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
2,4-Dimethylphenol	<0.38		0.38	0.15	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Hexachlorobutadiene	<0.19		0.19	0.060	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Naphthalene	<0.038		0.038	0.0059	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
2,4-Dichlorophenol	<0.38		0.38	0.091	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
4-Chloroaniline	<0.77		0.77	0.18	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
2,4,6-Trichlorophenol	<0.38		0.38	0.13	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
2,4,5-Trichlorophenol	<0.38		0.38	0.087	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Hexachlorocyclopentadiene	<0.77		0.77	0.22	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
2-Methylnaphthalene	<0.038		0.038	0.0070	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
2-Chloronaphthalene	<0.19		0.19	0.042	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
4-Chloro-3-methylphenol	<0.38		0.38	0.13	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
2,6-Dinitrotoluene	<0.19		0.19	0.075	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
2-Nitrophenol	<0.38		0.38	0.090	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
3-Nitroaniline	<0.38		0.38	0.12	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Dimethyl phthalate	<0.19		0.19	0.050	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
2,4-Dinitrophenol	<0.77		0.77	0.67	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Acenaphthylene	<0.038		0.038	0.0050	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
2,4-Dinitrotoluene	<0.19		0.19	0.061	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Acenaphthene	<0.038		0.038	0.0069	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
4-Nitrophenol	<0.77		0.77	0.36	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Fluorene	<0.038		0.038	0.0054	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
4-Nitroaniline	<0.38		0.38	0.16	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.050	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Hexachlorobenzene	<0.077		0.077	0.0089	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Diethyl phthalate	<0.19		0.19	0.065	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Pentachlorophenol	<0.77		0.77	0.61	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
N-Nitrosodiphenylamine	<0.19		0.19	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
4,6-Dinitro-2-methylphenol	<0.38		0.38	0.31	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Phenanthrene	<0.038		0.038	0.0053	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Anthracene	<0.038		0.038	0.0064	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Carbazole	<0.19		0.19	0.099	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Di-n-butyl phthalate	<0.19		0.19	0.058	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Fluoranthene	<0.038		0.038	0.0071	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Pyrene	<0.038		0.038	0.0076	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Butyl benzyl phthalate	<0.19		0.19	0.073	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Benzo[a]anthracene	<0.038		0.038	0.0052	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1

Client Sample ID: 2471-5-B02
Date Collected: 03/24/14 14:50
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-12
Matrix: Solid
Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.038		0.038	0.010	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.070	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Di-n-octyl phthalate	<0.19		0.19	0.062	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Benzo[b]fluoranthene	<0.038		0.038	0.0083	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Benzo[k]fluoranthene	<0.038		0.038	0.011	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Benzo[a]pyrene	<0.038		0.038	0.0074	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Indeno[1,2,3-cd]pyrene	<0.038		0.038	0.0099	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Dibenz(a,h)anthracene	<0.038		0.038	0.0074	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
Benzo[g,h,i]perylene	<0.038		0.038	0.012	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1
3 & 4 Methylphenol	<0.19	*	0.19	0.064	mg/Kg	☼	03/26/14 07:20	03/27/14 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*49*		*25 - 110*	*03/26/14 07:20*	*03/27/14 19:42*	*1*
Phenol-d5	*58*		*31 - 110*	*03/26/14 07:20*	*03/27/14 19:42*	*1*
Nitrobenzene-d5	*45*		*25 - 115*	*03/26/14 07:20*	*03/27/14 19:42*	*1*
2-Fluorobiphenyl	*52*		*25 - 119*	*03/26/14 07:20*	*03/27/14 19:42*	*1*
2,4,6-Tribromophenol	*64*		*35 - 137*	*03/26/14 07:20*	*03/27/14 19:42*	*1*
Terphenyl-d14	*88*		*36 - 134*	*03/26/14 07:20*	*03/27/14 19:42*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.46	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Arsenic	**10**		0.57	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Barium	**61**		0.57	0.061	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Beryllium	**0.63**		0.23	0.046	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Boron	**6.6**		2.9	0.57	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Cadmium	**0.20**	**B**	0.11	0.015	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Calcium	**3400**	**B**	11	3.1	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Chromium	**17**		0.57	0.067	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Cobalt	**9.6**		0.29	0.057	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Copper	**24**		0.57	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Iron	**21000**		11	4.7	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Lead	**15**		0.29	0.085	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Magnesium	**4300**	**B**	5.7	1.2	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Manganese	**440**		0.57	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Nickel	**25**		0.57	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Potassium	**1900**		29	1.7	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Selenium	<0.57		0.57	0.20	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Silver	<0.29		0.29	0.021	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Sodium	**680**		57	7.7	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Thallium	**0.92**		0.57	0.24	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Vanadium	**21**		0.29	0.042	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	1
Zinc	**44**		1.1	0.23	mg/Kg	☼	03/25/14 16:00	03/26/14 18:22	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		04/02/14 09:00	04/02/14 19:18	1
Lead	<0.0075		0.0075	0.0075	mg/L		04/02/14 09:00	04/02/14 19:18	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-4

Client Sample ID: 2471-5-B02
Date Collected: 03/24/14 14:50
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-12
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.12	J	0.50	0.050	mg/L		03/28/14 09:00	03/28/14 20:25	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/28/14 09:00	03/28/14 20:25	1
Boron	0.98		0.10	0.050	mg/L		03/28/14 09:00	03/28/14 20:25	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/28/14 09:00	03/28/14 20:25	1
Chromium	0.020	J	0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:25	1
Cobalt	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:25	1
Iron	18	B	0.20	0.20	mg/L		03/28/14 09:00	03/28/14 20:25	1
Lead	0.011		0.0075	0.0075	mg/L		03/28/14 09:00	03/28/14 20:25	1
Manganese	0.096		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:25	1
Nickel	0.019	J	0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:25	1
Selenium	<0.050		0.050	0.010	mg/L		03/28/14 09:00	03/28/14 20:25	1
Silver	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:25	1
Zinc	0.068	J B	0.10	0.020	mg/L		03/28/14 09:00	03/28/14 20:25	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		03/28/14 09:00	03/31/14 18:49	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/28/14 09:00	03/31/14 18:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		03/28/14 14:45	03/31/14 10:53	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.019	0.0075	mg/Kg	☼	03/25/14 15:00	03/26/14 11:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.02		0.200	0.200	SU			03/31/14 15:16	1

Client Sample ID: 2471-5-B03
Date Collected: 03/24/14 14:35
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-13
Matrix: Solid
Percent Solids: 81.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.013	*	0.0041	0.0018	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Benzene	<0.0041		0.0041	0.00057	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Bromodichloromethane	<0.0041		0.0041	0.00071	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Bromoform	<0.0041		0.0041	0.00095	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Bromomethane	<0.0041	*	0.0041	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
2-Butanone (MEK)	<0.0041		0.0041	0.0015	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Carbon disulfide	<0.0041		0.0041	0.00062	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Carbon tetrachloride	<0.0041	*	0.0041	0.00075	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Chlorobenzene	<0.0041		0.0041	0.00042	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Chloroethane	<0.0041	*	0.0041	0.0011	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Chloroform	<0.0041		0.0041	0.00048	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Chloromethane	<0.0041		0.0041	0.00087	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
cis-1,2-Dichloroethene	<0.0041		0.0041	0.00059	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
cis-1,3-Dichloropropene	<0.0041		0.0041	0.00054	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Dibromochloromethane	<0.0041		0.0041	0.00072	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
1,1-Dichloroethane	<0.0041		0.0041	0.00066	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
1,2-Dichloroethane	<0.0041		0.0041	0.00061	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
1,1-Dichloroethene	<0.0041		0.0041	0.00067	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
1,2-Dichloropropane	<0.0041		0.0041	0.00063	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
1,3-Dichloropropene, Total	<0.0041		0.0041	0.00054	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Ethylbenzene	<0.0041		0.0041	0.00084	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
2-Hexanone	<0.0041		0.0041	0.0012	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Methylene Chloride	<0.0041		0.0041	0.0011	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0011	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Methyl tert-butyl ether	<0.0041		0.0041	0.00068	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Styrene	<0.0041		0.0041	0.00054	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
1,1,2,2-Tetrachloroethane	<0.0041		0.0041	0.00084	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Tetrachloroethene	<0.0041		0.0041	0.00063	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Toluene	<0.0041		0.0041	0.00058	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
trans-1,2-Dichloroethene	<0.0041		0.0041	0.00057	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
trans-1,3-Dichloropropene	<0.0041		0.0041	0.00074	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
1,1,1-Trichloroethane	<0.0041		0.0041	0.00062	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
1,1,2-Trichloroethane	<0.0041		0.0041	0.00057	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Trichloroethene	<0.0041		0.0041	0.00068	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Vinyl acetate	<0.0041		0.0041	0.00065	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Vinyl chloride	<0.0041		0.0041	0.00087	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1
Xylenes, Total	<0.0083		0.0083	0.00038	mg/Kg	☼	03/25/14 07:20	03/27/14 20:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 122*	*03/25/14 07:20*	*03/27/14 20:38*	*1*
Dibromofluoromethane	*114*		*75 - 120*	*03/25/14 07:20*	*03/27/14 20:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*70 - 134*	*03/25/14 07:20*	*03/27/14 20:38*	*1*
Toluene-d8 (Surr)	*102*		*75 - 122*	*03/25/14 07:20*	*03/27/14 20:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20	*	0.20	0.087	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.059	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
1,3-Dichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
1,4-Dichlorobenzene	<0.20		0.20	0.050	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-4

Client Sample ID: 2471-5-B03
Date Collected: 03/24/14 14:35
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-13
Matrix: Solid
Percent Solids: 81.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
2-Methylphenol	<0.20	*	0.20	0.063	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.048	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Hexachloroethane	<0.20		0.20	0.060	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
2-Chlorophenol	<0.20		0.20	0.067	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Nitrobenzene	<0.039		0.039	0.0098	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.040	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.042	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Isophorone	<0.20		0.20	0.044	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Hexachlorobutadiene	<0.20		0.20	0.062	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
2,4-Dichlorophenol	<0.39		0.39	0.093	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
4-Chloroaniline	<0.79		0.79	0.18	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Hexachlorocyclopentadiene	<0.79		0.79	0.23	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
2-Methylnaphthalene	<0.039		0.039	0.0072	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
2-Nitroaniline	<0.20		0.20	0.053	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
2-Chloronaphthalene	<0.20		0.20	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
2,6-Dinitrotoluene	<0.20		0.20	0.077	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
2-Nitrophenol	<0.39		0.39	0.093	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Dimethyl phthalate	<0.20		0.20	0.051	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
2,4-Dinitrophenol	<0.79		0.79	0.69	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Acenaphthylene	<0.039		0.039	0.0052	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
2,4-Dinitrotoluene	<0.20		0.20	0.062	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Dibenzofuran	<0.20		0.20	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
4-Nitrophenol	<0.79		0.79	0.37	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.052	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Hexachlorobenzene	<0.079		0.079	0.0091	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Diethyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Pentachlorophenol	<0.79		0.79	0.63	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
N-Nitrosodiphenylamine	<0.20		0.20	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
4,6-Dinitro-2-methylphenol	<0.39		0.39	0.31	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Phenanthrene	<0.039		0.039	0.0055	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Carbazole	<0.20		0.20	0.10	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Di-n-butyl phthalate	<0.20		0.20	0.060	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Fluoranthene	<0.039		0.039	0.0073	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Pyrene	<0.039		0.039	0.0078	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Butyl benzyl phthalate	<0.20		0.20	0.075	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Benzo[a]anthracene	<0.039		0.039	0.0053	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1

Client Sample ID: 2471-5-B03
Date Collected: 03/24/14 14:35
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-13
Matrix: Solid
Percent Solids: 81.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.055	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.072	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Di-n-octyl phthalate	<0.20		0.20	0.064	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Benzo[b]fluoranthene	<0.039		0.039	0.0085	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Benzo[k]fluoranthene	<0.039		0.039	0.012	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Benzo[a]pyrene	<0.039		0.039	0.0076	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0076	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
Benzo[g,h,i]perylene	<0.039		0.039	0.013	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1
3 & 4 Methylphenol	<0.20	*	0.20	0.065	mg/Kg	☼	03/26/14 07:20	03/27/14 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*54*		*25 - 110*	*03/26/14 07:20*	*03/27/14 20:28*	*1*
Phenol-d5	*58*		*31 - 110*	*03/26/14 07:20*	*03/27/14 20:28*	*1*
Nitrobenzene-d5	*46*		*25 - 115*	*03/26/14 07:20*	*03/27/14 20:28*	*1*
2-Fluorobiphenyl	*55*		*25 - 119*	*03/26/14 07:20*	*03/27/14 20:28*	*1*
2,4,6-Tribromophenol	*62*		*35 - 137*	*03/26/14 07:20*	*03/27/14 20:28*	*1*
Terphenyl-d14	*86*		*36 - 134*	*03/26/14 07:20*	*03/27/14 20:28*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.47	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Arsenic	**5.2**		0.59	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Barium	**55**		0.59	0.063	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Beryllium	**0.61**		0.24	0.047	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Boron	**15**		3.0	0.59	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Cadmium	**0.44**	**B**	0.12	0.015	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Calcium	**52000**	**B**	12	3.2	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Chromium	**20**		0.59	0.068	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Cobalt	**7.3**		0.30	0.059	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Copper	**14**		0.59	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Iron	**18000**		12	4.9	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Lead	**6.2**		0.30	0.088	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Magnesium	**23000**	**B**	5.9	1.2	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Manganese	**330**		0.59	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Nickel	**21**		0.59	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Potassium	**3900**		30	1.8	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Selenium	<0.59		0.59	0.21	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Silver	<0.30		0.30	0.021	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Sodium	**760**		59	7.9	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Thallium	<0.59		0.59	0.25	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Vanadium	**24**		0.30	0.044	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	1
Zinc	**35**		1.2	0.24	mg/Kg	☼	03/25/14 16:00	03/26/14 18:29	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		04/02/14 09:00	04/02/14 19:24	1
Lead	<0.0075		0.0075	0.0075	mg/L		04/02/14 09:00	04/02/14 19:24	1
Manganese	**2.6**		0.025	0.010	mg/L		04/02/14 09:00	04/02/14 19:24	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-4

Client Sample ID: 2471-5-B03
Date Collected: 03/24/14 14:35
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-13
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.20	J	0.50	0.050	mg/L		03/28/14 09:00	03/28/14 20:31	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/28/14 09:00	03/28/14 20:31	1
Boron	1.1		0.10	0.050	mg/L		03/28/14 09:00	03/28/14 20:31	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/28/14 09:00	03/28/14 20:31	1
Chromium	0.040		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:31	1
Cobalt	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:31	1
Iron	33	B	0.20	0.20	mg/L		03/28/14 09:00	03/28/14 20:31	1
Lead	0.014		0.0075	0.0075	mg/L		03/28/14 09:00	03/28/14 20:31	1
Manganese	0.17		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:31	1
Nickel	0.038		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:31	1
Selenium	<0.050		0.050	0.010	mg/L		03/28/14 09:00	03/28/14 20:31	1
Silver	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:31	1
Zinc	0.091	J B	0.10	0.020	mg/L		03/28/14 09:00	03/28/14 20:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0060		0.0060	0.0060	mg/L		03/28/14 09:00	03/31/14 18:53	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/28/14 09:00	03/31/14 18:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		03/28/14 14:45	03/31/14 10:55	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039		0.018	0.0070	mg/Kg	☼	03/25/14 15:00	03/26/14 11:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.20		0.200	0.200	SU			03/31/14 15:21	1

Client Sample ID: 2471-5-B03 Dup
Date Collected: 03/24/14 14:40
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-14
Matrix: Solid
Percent Solids: 82.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0041	*	0.0041	0.0018	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Benzene	<0.0041		0.0041	0.00057	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Bromodichloromethane	<0.0041		0.0041	0.00071	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Bromoform	<0.0041		0.0041	0.00095	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Bromomethane	<0.0041	*	0.0041	0.0012	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
2-Butanone (MEK)	<0.0041		0.0041	0.0015	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Carbon disulfide	<0.0041		0.0041	0.00062	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Carbon tetrachloride	<0.0041	*	0.0041	0.00075	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Chlorobenzene	<0.0041		0.0041	0.00042	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Chloroethane	<0.0041	*	0.0041	0.0011	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Chloroform	<0.0041		0.0041	0.00047	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Chloromethane	<0.0041		0.0041	0.00087	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
cis-1,2-Dichloroethene	<0.0041		0.0041	0.00058	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
cis-1,3-Dichloropropene	<0.0041		0.0041	0.00054	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Dibromochloromethane	<0.0041		0.0041	0.00072	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
1,1-Dichloroethane	<0.0041		0.0041	0.00065	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
1,2-Dichloroethane	<0.0041		0.0041	0.00061	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
1,1-Dichloroethene	<0.0041		0.0041	0.00067	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
1,2-Dichloropropane	<0.0041		0.0041	0.00063	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
1,3-Dichloropropene, Total	<0.0041		0.0041	0.00054	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Ethylbenzene	<0.0041		0.0041	0.00083	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
2-Hexanone	<0.0041		0.0041	0.0012	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Methylene Chloride	<0.0041		0.0041	0.0011	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
4-Methyl-2-pentanone (MIBK)	<0.0041		0.0041	0.0011	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Methyl tert-butyl ether	<0.0041		0.0041	0.00068	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Styrene	<0.0041		0.0041	0.00054	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
1,1,2,2-Tetrachloroethane	<0.0041		0.0041	0.00083	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Tetrachloroethene	<0.0041		0.0041	0.00063	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Toluene	<0.0041		0.0041	0.00058	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
trans-1,2-Dichloroethene	<0.0041		0.0041	0.00057	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
trans-1,3-Dichloropropene	<0.0041		0.0041	0.00074	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
1,1,1-Trichloroethane	<0.0041		0.0041	0.00062	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
1,1,2-Trichloroethane	<0.0041		0.0041	0.00056	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Trichloroethene	<0.0041		0.0041	0.00068	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Vinyl acetate	<0.0041		0.0041	0.00065	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Vinyl chloride	<0.0041		0.0041	0.00087	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1
Xylenes, Total	<0.0083		0.0083	0.00037	mg/Kg	☼	03/25/14 07:20	03/27/14 21:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 122*	*03/25/14 07:20*	*03/27/14 21:01*	*1*
Dibromofluoromethane	*111*		*75 - 120*	*03/25/14 07:20*	*03/27/14 21:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*70 - 134*	*03/25/14 07:20*	*03/27/14 21:01*	*1*
Toluene-d8 (Surr)	*94*		*75 - 122*	*03/25/14 07:20*	*03/27/14 21:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.19		0.19	0.086	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Bis(2-chloroethyl)ether	<0.19		0.19	0.058	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
1,3-Dichlorobenzene	<0.19		0.19	0.044	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
1,4-Dichlorobenzene	<0.19		0.19	0.050	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-4

Client Sample ID: 2471-5-B03 Dup
Date Collected: 03/24/14 14:40
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-14
Matrix: Solid
Percent Solids: 82.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.19		0.19	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
2-Methylphenol	<0.19		0.19	0.062	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
2,2'-oxybis[1-chloropropane]	<0.19		0.19	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
N-Nitrosodi-n-propylamine	<0.19		0.19	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Hexachloroethane	<0.19		0.19	0.059	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
2-Chlorophenol	<0.19		0.19	0.066	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Nitrobenzene	<0.039		0.039	0.0097	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Bis(2-chloroethoxy)methane	<0.19		0.19	0.040	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
1,2,4-Trichlorobenzene	<0.19		0.19	0.042	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Isophorone	<0.19		0.19	0.044	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
2,4-Dimethylphenol	<0.39		0.39	0.15	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Hexachlorobutadiene	<0.19		0.19	0.061	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Naphthalene	<0.039		0.039	0.0060	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
2,4-Dichlorophenol	<0.39		0.39	0.092	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
4-Chloroaniline	<0.78		0.78	0.18	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
2,4,6-Trichlorophenol	<0.39		0.39	0.13	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
2,4,5-Trichlorophenol	<0.39		0.39	0.089	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Hexachlorocyclopentadiene	<0.78		0.78	0.22	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
2-Methylnaphthalene	<0.039		0.039	0.0071	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
2-Nitroaniline	<0.19		0.19	0.052	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
2-Chloronaphthalene	<0.19		0.19	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
4-Chloro-3-methylphenol	<0.39		0.39	0.13	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
2,6-Dinitrotoluene	<0.19		0.19	0.076	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
2-Nitrophenol	<0.39		0.39	0.092	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
3-Nitroaniline	<0.39		0.39	0.12	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Dimethyl phthalate	<0.19		0.19	0.051	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
2,4-Dinitrophenol	<0.78		0.78	0.68	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Acenaphthylene	<0.039		0.039	0.0051	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
2,4-Dinitrotoluene	<0.19		0.19	0.062	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Acenaphthene	<0.039		0.039	0.0070	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Dibenzofuran	<0.19		0.19	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
4-Nitrophenol	<0.78		0.78	0.37	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Fluorene	<0.039		0.039	0.0055	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
4-Nitroaniline	<0.39		0.39	0.16	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
4-Bromophenyl phenyl ether	<0.19		0.19	0.051	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Hexachlorobenzene	<0.078		0.078	0.0090	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Diethyl phthalate	<0.19		0.19	0.066	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
4-Chlorophenyl phenyl ether	<0.19		0.19	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Pentachlorophenol	<0.78		0.78	0.62	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
N-Nitrosodiphenylamine	<0.19		0.19	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
4,6-Dinitro-2-methylphenol	<0.39		0.39	0.31	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Phenanthrene	<0.039		0.039	0.0054	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Anthracene	<0.039		0.039	0.0065	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Carbazole	<0.19		0.19	0.10	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Di-n-butyl phthalate	<0.19		0.19	0.059	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Fluoranthene	<0.039		0.039	0.0072	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Pyrene	<0.039		0.039	0.0077	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Butyl benzyl phthalate	<0.19		0.19	0.074	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Benzo[a]anthracene	<0.039		0.039	0.0052	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1

Client Sample ID: 2471-5-B03 Dup
Date Collected: 03/24/14 14:40
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-14
Matrix: Solid
Percent Solids: 82.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.039		0.039	0.011	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
3,3'-Dichlorobenzidine	<0.19		0.19	0.054	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Bis(2-ethylhexyl) phthalate	<0.19		0.19	0.071	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Di-n-octyl phthalate	<0.19		0.19	0.063	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Benzo[b]fluoranthene	<0.039		0.039	0.0084	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Benzo[k]fluoranthene	<0.039		0.039	0.011	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Benzo[a]pyrene	<0.039		0.039	0.0075	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Indeno[1,2,3-cd]pyrene	<0.039		0.039	0.010	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Dibenz(a,h)anthracene	<0.039		0.039	0.0075	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
Benzo[g,h,i]perylene	<0.039		0.039	0.012	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1
3 & 4 Methylphenol	<0.19		0.19	0.065	mg/Kg	☼	03/26/14 07:20	03/27/14 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*58*		*25 - 110*	*03/26/14 07:20*	*03/27/14 18:52*	*1*
Phenol-d5	*64*		*31 - 110*	*03/26/14 07:20*	*03/27/14 18:52*	*1*
Nitrobenzene-d5	*49*		*25 - 115*	*03/26/14 07:20*	*03/27/14 18:52*	*1*
2-Fluorobiphenyl	*59*		*25 - 119*	*03/26/14 07:20*	*03/27/14 18:52*	*1*
2,4,6-Tribromophenol	*66*		*35 - 137*	*03/26/14 07:20*	*03/27/14 18:52*	*1*
Terphenyl-d14	*96*		*36 - 134*	*03/26/14 07:20*	*03/27/14 18:52*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.47	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Arsenic	**3.5**		0.58	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Barium	**78**		0.58	0.063	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Beryllium	**0.72**		0.23	0.047	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Boron	**14**		2.9	0.58	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Cadmium	**0.39**	**B**	0.12	0.015	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Calcium	**31000**	**B**	12	3.2	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Chromium	**24**		0.58	0.068	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Cobalt	**7.3**		0.29	0.058	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Copper	**15**		0.58	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Iron	**19000**		12	4.8	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Lead	**6.9**		0.29	0.087	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Magnesium	**21000**	**B**	5.8	1.2	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Manganese	**330**		0.58	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Nickel	**23**		0.58	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Potassium	**3800**		29	1.8	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Selenium	<0.58		0.58	0.21	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Silver	<0.29		0.29	0.021	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Sodium	**1200**		58	7.8	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Thallium	**0.28**	**J**	0.58	0.25	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Vanadium	**26**		0.29	0.043	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	1
Zinc	**39**		1.2	0.24	mg/Kg	☼	03/25/14 16:00	03/26/14 18:35	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		04/02/14 09:00	04/02/14 19:45	1
Lead	<0.0075		0.0075	0.0075	mg/L		04/02/14 09:00	04/02/14 19:45	1
Manganese	**2.6**		0.025	0.010	mg/L		04/02/14 09:00	04/02/14 19:45	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-4

Client Sample ID: 2471-5-B03 Dup
Date Collected: 03/24/14 14:40
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-14
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.28	J	0.50	0.050	mg/L		03/28/14 09:00	03/28/14 20:37	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/28/14 09:00	03/28/14 20:37	1
Boron	0.61		0.10	0.050	mg/L		03/28/14 09:00	03/28/14 20:37	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/28/14 09:00	03/28/14 20:37	1
Chromium	0.068		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:37	1
Cobalt	0.015	J	0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:37	1
Iron	59	B	0.20	0.20	mg/L		03/28/14 09:00	03/28/14 20:37	1
Lead	0.024		0.0075	0.0075	mg/L		03/28/14 09:00	03/28/14 20:37	1
Manganese	0.29		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:37	1
Nickel	0.069		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:37	1
Selenium	<0.050		0.050	0.010	mg/L		03/28/14 09:00	03/28/14 20:37	1
Silver	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:37	1
Zinc	0.15	B	0.10	0.020	mg/L		03/28/14 09:00	03/28/14 20:37	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		03/28/14 09:00	03/31/14 18:56	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/28/14 09:00	03/31/14 18:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		03/28/14 14:45	03/31/14 10:57	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.023		0.020	0.0078	mg/Kg	☼	03/25/14 15:00	03/26/14 11:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.24		0.200	0.200	SU			03/31/14 15:26	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
X	Surrogate is outside control limits

Metals

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

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
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	Project Name: Olympia Fields, Cook Co.	COC No.: 1 of 1
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 No.: IDOT 2013-060 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other Sampler: KAW ZK	Lab Job No.: 500-73777 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

ANALYSES

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids	Waste Characterization				Comments
11	2471-5-B01	3/24/14	3:00	S	X	X					X	X	X	X					0-5'
12	2471-5-B02	3/24/14	2:50	S	X	X					X	X	X	X					0-5'
13	2471-5-B03	3/24/14	2:35	S	X	X					X	X	X	X					0-5'
14	2471-5-B03 DUP	3/24/14	2:40	S	X	X					X	X	X	X					0-5'

Relinquished by:	Date/Time	Received by:	Date/Time
[signature]	3/24/14 4:42	[signature]	3/24/14 1642
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

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

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

I. Source Location Information

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

Project Name: FAU 3778 (Crawford Ave at 203rd Street) Office Phone Number, if available: _____

Physical Site Location (address, inclduding number and street):
20402 Crawford Avenue

City: Olympia Fields State: IL Zip Code: 60443

County: Cook Township: Rich

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

Latitude: 41.51859 (Decimal Degrees) Longitude: -87.71337 (-Decimal Degrees)

Identify how the lat/long data were determined:

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

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

II. Owner/Operator Information for Source Site

Site Owner		Site Operator	
Name:	Illinois Department of Transportation	Name:	Illinois Department of Transportation
Street Address:	201 West Center Court	Street Address:	201 West Center Court
PO Box:		PO Box:	
City:	Schaumburg State: IL	City:	Schaumburg State: IL
Zip Code:	60196-1096 Phone: 847-705-4101	Zip Code:	60196-1096 Phone: 847-705-4101
Contact:	Sam Mead	Contact:	Sam Mead
Email, if available:	Sam.Mead@illinois.gov	Email, if available:	Sam.Mead@illinois.gov

Project Name: FAU 3778 (Crawford Ave at 203rd Street)

Latitude: 41.51859 Longitude: -87.71337

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 appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATION 2471-6-B01 WAS SAMPLED ADJACENT TO SITE 2471-6. SEE TABLE 3f AND FIGURE 2 OF THE REVISED 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 JOB ID NO.: 500-73777-5

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

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

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

Company Name: IDOT Bureau of Design and Environment

Street Address: 2300 South Dirksen Parkway

City: Springfield State: IL Zip Code: 62764

Phone: 217.785.4246

Steven Gobelman
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

6/3/14
Date:

P.E. and L.P.G. Seal:

STEVEN GOBELMAN
196-000598
LICENSED
PROFESSIONAL
GEOLOGIST
STATE OF ILLINOIS

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
m-Xylene
o-Xylene
p-Xylene
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3´-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo (a) anthracene
Benzo (a) pyrene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Semivolatile Organic Compounds (mg/kg) (cont.)
Benzo (b) fluoranthene
Benzo (g,h,i) perylene
Benzo (k) fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo (a,h) anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno (1,2,3-cd) pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Potassium
Selenium
Silver
Sodium
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 2471-6

Progressive Dental

Sample ID	2471-6-B01	[1] Most Stringent MAC	[2] Outside a Populated Area MAC	[3] Populated non-Metropolitan Statistical Area MAC	[4] Within Chicago Corporate Limits MAC	[5] Metropolitan Statistical Area MAC	[6] Class I Soil TCLP/SPLP Comparisons Only	[7] Most Stringent TACO Tier 1 Residential Objective
Sample Depth (ft)	0-3							
Sample Date	3/24/2014							
PID	0							
Sample pH	7.65							
Matrix	Soil							
No Contaminants of Concern Noted.								

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-73777-5
Client Project/Site: IDOT - Olympia Fields - WO 060

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

Attn: Mike Nelson

Jodie Bracken

Authorized for release by:
4/4/2014 11:03:25 AM
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: 2471-6-B01
Date Collected: 03/24/14 15:10
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-15
Matrix: Solid
Percent Solids: 79.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0071	*	0.0051	0.0022	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Benzene	<0.0051		0.0051	0.00070	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Bromodichloromethane	<0.0051		0.0051	0.00088	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Bromoform	<0.0051		0.0051	0.0012	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Bromomethane	<0.0051	*	0.0051	0.0015	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
2-Butanone (MEK)	<0.0051		0.0051	0.0019	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Carbon disulfide	<0.0051		0.0051	0.00077	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Carbon tetrachloride	<0.0051	*	0.0051	0.00093	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Chlorobenzene	<0.0051		0.0051	0.00052	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Chloroethane	<0.0051	*	0.0051	0.0014	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Chloroform	<0.0051		0.0051	0.00059	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Chloromethane	<0.0051		0.0051	0.0011	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
cis-1,2-Dichloroethene	<0.0051		0.0051	0.00072	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
cis-1,3-Dichloropropene	<0.0051		0.0051	0.00067	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Dibromochloromethane	<0.0051		0.0051	0.00089	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
1,1-Dichloroethane	<0.0051		0.0051	0.00081	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
1,2-Dichloroethane	<0.0051		0.0051	0.00076	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
1,1-Dichloroethene	<0.0051		0.0051	0.00083	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
1,2-Dichloropropane	<0.0051		0.0051	0.00078	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
1,3-Dichloropropene, Total	<0.0051		0.0051	0.00067	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Ethylbenzene	<0.0051		0.0051	0.0010	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
2-Hexanone	<0.0051		0.0051	0.0015	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Methylene Chloride	<0.0051		0.0051	0.0014	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
4-Methyl-2-pentanone (MIBK)	<0.0051		0.0051	0.0013	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Methyl tert-butyl ether	<0.0051		0.0051	0.00085	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Styrene	<0.0051		0.0051	0.00067	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
1,1,2,2-Tetrachloroethane	<0.0051		0.0051	0.0010	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Tetrachloroethene	<0.0051		0.0051	0.00078	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Toluene	<0.0051		0.0051	0.00072	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
trans-1,2-Dichloroethene	<0.0051		0.0051	0.00070	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
trans-1,3-Dichloropropene	<0.0051		0.0051	0.00092	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
1,1,1-Trichloroethane	<0.0051		0.0051	0.00077	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
1,1,2-Trichloroethane	<0.0051		0.0051	0.00070	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Trichloroethene	<0.0051		0.0051	0.00085	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Vinyl acetate	<0.0051		0.0051	0.00081	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Vinyl chloride	<0.0051		0.0051	0.0011	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1
Xylenes, Total	<0.010		0.010	0.00046	mg/Kg	☼	03/25/14 07:20	03/27/14 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 122*	*03/25/14 07:20*	*03/27/14 21:24*	*1*
Dibromofluoromethane	*111*		*75 - 120*	*03/25/14 07:20*	*03/27/14 21:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*03/25/14 07:20*	*03/27/14 21:24*	*1*
Toluene-d8 (Surr)	*99*		*75 - 122*	*03/25/14 07:20*	*03/27/14 21:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.21		0.21	0.093	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Bis(2-chloroethyl)ether	<0.21		0.21	0.062	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
1,3-Dichlorobenzene	<0.21		0.21	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
1,4-Dichlorobenzene	<0.21		0.21	0.053	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-5

Client Sample ID: 2471-6-B01
Date Collected: 03/24/14 15:10
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-15
Matrix: Solid
Percent Solids: 79.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.21		0.21	0.050	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
2-Methylphenol	<0.21		0.21	0.067	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
2,2'-oxybis[1-chloropropane]	<0.21		0.21	0.048	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
N-Nitrosodi-n-propylamine	<0.21		0.21	0.051	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Hexachloroethane	<0.21		0.21	0.063	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
2-Chlorophenol	<0.21		0.21	0.071	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Nitrobenzene	<0.041		0.041	0.010	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Bis(2-chloroethoxy)methane	<0.21		0.21	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
1,2,4-Trichlorobenzene	<0.21		0.21	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Isophorone	<0.21		0.21	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
2,4-Dimethylphenol	<0.41		0.41	0.16	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Hexachlorobutadiene	<0.21		0.21	0.065	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Naphthalene	<0.041		0.041	0.0064	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
2,4-Dichlorophenol	<0.41		0.41	0.099	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
4-Chloroaniline	<0.84		0.84	0.20	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
2,4,6-Trichlorophenol	<0.41		0.41	0.14	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
2,4,5-Trichlorophenol	<0.41		0.41	0.095	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Hexachlorocyclopentadiene	<0.84		0.84	0.24	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
2-Methylnaphthalene	<0.041		0.041	0.0077	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
2-Nitroaniline	<0.21		0.21	0.056	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
2-Chloronaphthalene	<0.21		0.21	0.046	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
4-Chloro-3-methylphenol	<0.41		0.41	0.14	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
2,6-Dinitrotoluene	<0.21		0.21	0.082	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
2-Nitrophenol	<0.41		0.41	0.098	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
3-Nitroaniline	<0.41		0.41	0.13	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Dimethyl phthalate	<0.21		0.21	0.054	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
2,4-Dinitrophenol	<0.84		0.84	0.73	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Acenaphthylene	<0.041		0.041	0.0055	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
2,4-Dinitrotoluene	<0.21		0.21	0.066	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Acenaphthene	<0.041		0.041	0.0075	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Dibenzofuran	<0.21		0.21	0.049	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
4-Nitrophenol	<0.84		0.84	0.40	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Fluorene	<0.041		0.041	0.0059	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
4-Nitroaniline	<0.41		0.41	0.17	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
4-Bromophenyl phenyl ether	<0.21		0.21	0.055	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Hexachlorobenzene	<0.084		0.084	0.0097	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Diethyl phthalate	<0.21		0.21	0.071	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
4-Chlorophenyl phenyl ether	<0.21		0.21	0.049	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Pentachlorophenol	<0.84		0.84	0.67	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
N-Nitrosodiphenylamine	<0.21		0.21	0.049	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
4,6-Dinitro-2-methylphenol	<0.41		0.41	0.33	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Phenanthrene	<0.041		0.041	0.0058	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Anthracene	<0.041		0.041	0.0070	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Carbazole	<0.21		0.21	0.11	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Di-n-butyl phthalate	<0.21		0.21	0.063	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Fluoranthene	**0.0095**	**J**	0.041	0.0077	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Pyrene	**0.011**	**J**	0.041	0.0083	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Butyl benzyl phthalate	<0.21		0.21	0.079	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Benzo[a]anthracene	<0.041		0.041	0.0056	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1

Client Sample ID: 2471-6-B01
Date Collected: 03/24/14 15:10
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-15
Matrix: Solid
Percent Solids: 79.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	<0.041		0.041	0.011	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
3,3'-Dichlorobenzidine	<0.21		0.21	0.058	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Bis(2-ethylhexyl) phthalate	<0.21		0.21	0.076	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Di-n-octyl phthalate	<0.21		0.21	0.068	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Benzo[b]fluoranthene	**0.0096**	**J**	0.041	0.0090	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Benzo[k]fluoranthene	<0.041		0.041	0.012	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Benzo[a]pyrene	<0.041		0.041	0.0081	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Indeno[1,2,3-cd]pyrene	<0.041		0.041	0.011	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Dibenz(a,h)anthracene	<0.041		0.041	0.0080	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
Benzo[g,h,i]perylene	<0.041		0.041	0.013	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1
3 & 4 Methylphenol	<0.21		0.21	0.069	mg/Kg	☼	03/26/14 07:20	03/27/14 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*47*		*25 - 110*	*03/26/14 07:20*	*03/27/14 19:17*	*1*
Phenol-d5	*58*		*31 - 110*	*03/26/14 07:20*	*03/27/14 19:17*	*1*
Nitrobenzene-d5	*43*		*25 - 115*	*03/26/14 07:20*	*03/27/14 19:17*	*1*
2-Fluorobiphenyl	*50*		*25 - 119*	*03/26/14 07:20*	*03/27/14 19:17*	*1*
2,4,6-Tribromophenol	*68*		*35 - 137*	*03/26/14 07:20*	*03/27/14 19:17*	*1*
Terphenyl-d14	*87*		*36 - 134*	*03/26/14 07:20*	*03/27/14 19:17*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.49	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Arsenic	**6.6**		0.61	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Barium	**120**		0.61	0.066	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Beryllium	**0.92**		0.25	0.049	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Boron	**12**		3.1	0.61	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Cadmium	**0.44**	**B**	0.12	0.016	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Calcium	**12000**	**B**	12	3.3	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Chromium	**29**		0.61	0.071	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Cobalt	**10**		0.31	0.061	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Copper	**18**		0.61	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Iron	**26000**		12	5.0	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Lead	**9.5**		0.31	0.091	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Magnesium	**11000**	**B**	6.1	1.3	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Manganese	**370**		0.61	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Nickel	**29**		0.61	0.12	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Potassium	**3700**		31	1.8	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Selenium	<0.61		0.61	0.22	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Silver	<0.31		0.31	0.022	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Sodium	**1400**		61	8.2	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Thallium	<0.61		0.61	0.26	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Vanadium	**35**		0.31	0.045	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1
Zinc	**52**		1.2	0.25	mg/Kg	☼	03/25/14 16:00	03/26/14 18:41	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.38**		0.20	0.20	mg/L		04/02/14 09:00	04/02/14 19:51	1
Lead	<0.0075		0.0075	0.0075	mg/L		04/02/14 09:00	04/02/14 19:51	1
Manganese	**0.035**		0.025	0.010	mg/L		04/02/14 09:00	04/02/14 19:51	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-5

Client Sample ID: 2471-6-B01
Date Collected: 03/24/14 15:10
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-15
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.20	J	0.50	0.050	mg/L		03/28/14 09:00	03/28/14 20:44	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/28/14 09:00	03/28/14 20:44	1
Boron	0.66		0.10	0.050	mg/L		03/28/14 09:00	03/28/14 20:44	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/28/14 09:00	03/28/14 20:44	1
Chromium	0.045		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:44	1
Cobalt	0.010	J	0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:44	1
Iron	49	B	0.20	0.20	mg/L		03/28/14 09:00	03/28/14 20:44	1
Lead	0.023		0.0075	0.0075	mg/L		03/28/14 09:00	03/28/14 20:44	1
Manganese	0.21		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:44	1
Nickel	0.041		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:44	1
Selenium	<0.050		0.050	0.010	mg/L		03/28/14 09:00	03/28/14 20:44	1
Silver	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:44	1
Zinc	0.11	B	0.10	0.020	mg/L		03/28/14 09:00	03/28/14 20:44	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		03/28/14 09:00	03/31/14 18:59	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/28/14 09:00	03/31/14 18:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000020	mg/L		03/28/14 14:45	03/31/14 10:59	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044		0.021	0.0082	mg/Kg	☼	03/25/14 15:00	03/26/14 12:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.65		0.200	0.200	SU			03/31/14 15:31	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-5

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

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

Metals

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

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
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: Olympia Fields, Cook Co Project No.: IDOT 2013-060 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** KM, ZK

COC No.: 1 of 1

Lab Job No.: 500-73777

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
15	2471-6-B01	3/24/14	3:10	S	X	X					X	X	X	X						0-3'

Relinquished by: Kevin Aylward	Date/Time 3/24/14 4:42	Received by: Sharon Scott	Date/Time 3/24/14 1642
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Illinois Environmental Protection Agency

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

Uncontaminated Soil Certification by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663 Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

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

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

I. Source Location Information

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

Project Name: FAU 3778 (Crawford Ave at 203rd Street) Office Phone Number, if available: _____

Physical Site Location (address, incldluding number and street):
20414-20434 Crawford Avenue

City: Olympia Fields State: IL Zip Code: 60443

County: Cook Township: Rich

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

Latitude: 41.51821 (Decimal Degrees) Longitude: -87.71338 (-Decimal Degrees)

Identify how the lat/long data were determined:

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

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

II. Owner/Operator Information for Source Site

Site Owner		Site Operator	
Name:	Illinois Department of Transportation	Name:	Illinois Department of Transportation
Street Address:	201 West Center Court	Street Address:	201 West Center Court
PO Box:		PO Box:	
City:	Schaumburg State: IL	City:	Schaumburg State: IL
Zip Code:	60196-1096 Phone: 847-705-4101	Zip Code:	60196-1096 Phone: 847-705-4101
Contact:	Sam Mead	Contact:	Sam Mead
Email, if available:	Sam.Mead@illinois.gov	Email, if available:	Sam.Mead@illinois.gov

Project Name: FAU 3778 (Crawford Ave at 203rd Street)

Latitude: 41.51821 Longitude: -87.71338

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 appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATION 2471-7-B01 WAS SAMPLED ADJACENT TO SITE 2471-7. SEE TABLE 3g AND FIGURE 2 OF THE REVISED 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 JOB ID NO.: 500-73777-6

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

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

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

Company Name: IDOT Bureau of Design and Environment

Street Address: 2300 South Dirksen Parkway

City: Springfield State: IL Zip Code: 62764

Phone: 217.785.4246

Steven Gobelman
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

6/5/14
Date:

STEVEN GOBELMAN
196-000598
LICENSED
PROFESSIONAL
GEOLOGIST
STATE OF ILLINOIS

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

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

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Semivolatile Organic Compounds (mg/kg) (cont.)
Benzo (b) fluoranthene
Benzo (g,h,i) perylene
Benzo (k) fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo (a,h) anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno (1,2,3-cd) pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Potassium
Selenium
Silver
Sodium
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 2471-7

Residences

Sample ID	2471-7-B01	[1] Most Stringent MAC	[2] Outside a Populated Area MAC	[3] Populated non-Metropolitan Statistical Area MAC	[4] Within Chicago Corporate Limits MAC	[5] Metropolitan Statistical Area MAC	[6] Class I Soil TCLP/SPLP Comparisons Only	[7] Most Stringent TACO Tier 1 Residential Objective
Sample Depth (ft)	0-3							
Sample Date	3/24/2014							
PID	0							
Sample pH	8.09							
Matrix	Soil							
No Contaminants of Concern Noted.								

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 500-73777-6
Client Project/Site: IDOT - Olympia Fields - WO 060

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

Attn: Mike Nelson

Jodie Bracken

Authorized for release by:
4/4/2014 11:03:51 AM
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: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-6

Client Sample ID: 2471-7-B01
Date Collected: 03/24/14 15:20
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-16
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0049		0.0047	0.0020	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Benzene	<0.0047		0.0047	0.00064	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Bromodichloromethane	<0.0047		0.0047	0.00081	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Bromoform	<0.0047		0.0047	0.0011	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Bromomethane	<0.0047	*	0.0047	0.0014	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
2-Butanone (MEK)	<0.0047		0.0047	0.0017	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Carbon disulfide	<0.0047		0.0047	0.00070	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Carbon tetrachloride	<0.0047		0.0047	0.00085	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Chlorobenzene	<0.0047		0.0047	0.00048	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Chloroethane	<0.0047	*	0.0047	0.0013	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Chloroform	<0.0047		0.0047	0.00054	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Chloromethane	<0.0047		0.0047	0.00099	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
cis-1,2-Dichloroethene	<0.0047		0.0047	0.00066	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
cis-1,3-Dichloropropene	<0.0047		0.0047	0.00062	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Dibromochloromethane	<0.0047		0.0047	0.00082	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
1,1-Dichloroethane	<0.0047		0.0047	0.00074	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
1,2-Dichloroethane	<0.0047		0.0047	0.00070	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
1,1-Dichloroethene	<0.0047		0.0047	0.00076	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
1,2-Dichloropropane	<0.0047		0.0047	0.00071	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
1,3-Dichloropropene, Total	<0.0047		0.0047	0.00062	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Ethylbenzene	<0.0047		0.0047	0.00095	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
2-Hexanone	<0.0047		0.0047	0.0014	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Methylene Chloride	<0.0047		0.0047	0.0013	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
4-Methyl-2-pentanone (MIBK)	<0.0047		0.0047	0.0012	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Methyl tert-butyl ether	<0.0047		0.0047	0.00078	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Styrene	<0.0047		0.0047	0.00062	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
1,1,2,2-Tetrachloroethane	<0.0047		0.0047	0.00095	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Tetrachloroethene	<0.0047		0.0047	0.00072	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Toluene	<0.0047		0.0047	0.00066	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
trans-1,2-Dichloroethene	<0.0047		0.0047	0.00065	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
trans-1,3-Dichloropropene	<0.0047		0.0047	0.00084	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
1,1,1-Trichloroethane	<0.0047		0.0047	0.00070	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
1,1,2-Trichloroethane	<0.0047		0.0047	0.00064	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Trichloroethene	<0.0047		0.0047	0.00077	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Vinyl acetate	<0.0047		0.0047	0.00074	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Vinyl chloride	<0.0047		0.0047	0.00099	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1
Xylenes, Total	<0.0094		0.0094	0.00043	mg/Kg	☼	03/25/14 07:20	03/28/14 11:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 122*	*03/25/14 07:20*	*03/28/14 11:53*	*1*
Dibromofluoromethane	*112*		*75 - 120*	*03/25/14 07:20*	*03/28/14 11:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*70 - 134*	*03/25/14 07:20*	*03/28/14 11:53*	*1*
Toluene-d8 (Surr)	*102*		*75 - 122*	*03/25/14 07:20*	*03/28/14 11:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18	*	0.18	0.082	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-6

Client Sample ID: 2471-7-B01
Date Collected: 03/24/14 15:20
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-16
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
2-Methylphenol	<0.18	*	0.18	0.059	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.045	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Nitrobenzene	<0.036		0.036	0.0092	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.037	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
2,4-Dimethylphenol	<0.36		0.36	0.14	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Naphthalene	<0.036		0.036	0.0056	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
2,4-Dichlorophenol	<0.36		0.36	0.087	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
4-Chloroaniline	<0.74		0.74	0.17	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
2,4,6-Trichlorophenol	<0.36		0.36	0.13	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
2,4,5-Trichlorophenol	<0.36		0.36	0.084	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
2-Methylnaphthalene	<0.036		0.036	0.0068	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
2-Nitroaniline	<0.18		0.18	0.049	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
4-Chloro-3-methylphenol	<0.36		0.36	0.12	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
2-Nitrophenol	<0.36		0.36	0.087	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
3-Nitroaniline	<0.36		0.36	0.11	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Acenaphthylene	<0.036		0.036	0.0048	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Acenaphthene	<0.036		0.036	0.0066	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Fluorene	<0.036		0.036	0.0052	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
4-Nitroaniline	<0.36		0.36	0.15	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.048	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
4,6-Dinitro-2-methylphenol	<0.36		0.36	0.29	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Phenanthrene	**0.057**		0.036	0.0051	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Anthracene	**0.011**	**J**	0.036	0.0061	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Carbazole	<0.18		0.18	0.095	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Fluoranthene	**0.12**		0.036	0.0068	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Pyrene	**0.10**		0.036	0.0073	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Benzo[a]anthracene	**0.057**		0.036	0.0049	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1

Client Sample ID: 2471-7-B01
Date Collected: 03/24/14 15:20
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-16
Matrix: Solid
Percent Solids: 86.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.074**		0.036	0.010	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.051	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Di-n-octyl phthalate	**0.16**	**J**	0.18	0.060	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Benzo[b]fluoranthene	**0.094**		0.036	0.0079	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Benzo[k]fluoranthene	**0.037**		0.036	0.011	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Benzo[a]pyrene	**0.061**		0.036	0.0071	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Indeno[1,2,3-cd]pyrene	**0.047**		0.036	0.0095	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Dibenz(a,h)anthracene	**0.018**	**J**	0.036	0.0071	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
Benzo[g,h,i]perylene	**0.064**		0.036	0.012	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1
3 & 4 Methylphenol	<0.18	*	0.18	0.061	mg/Kg	☼	03/26/14 07:20	03/27/14 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*58*		*25 - 110*	*03/26/14 07:20*	*03/27/14 19:30*	*1*
Phenol-d5	*63*		*31 - 110*	*03/26/14 07:20*	*03/27/14 19:30*	*1*
Nitrobenzene-d5	*46*		*25 - 115*	*03/26/14 07:20*	*03/27/14 19:30*	*1*
2-Fluorobiphenyl	*58*		*25 - 119*	*03/26/14 07:20*	*03/27/14 19:30*	*1*
2,4,6-Tribromophenol	*90*		*35 - 137*	*03/26/14 07:20*	*03/27/14 19:30*	*1*
Terphenyl-d14	*72*		*36 - 134*	*03/26/14 07:20*	*03/27/14 19:30*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.44	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Arsenic	**3.1**		0.54	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Barium	**69**		0.54	0.058	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Beryllium	**0.54**		0.22	0.043	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Boron	**7.0**		2.7	0.54	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Cadmium	**0.32**	**B**	0.11	0.014	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Calcium	**12000**	**B**	11	2.9	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Chromium	**17**		0.54	0.063	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Cobalt	**6.5**		0.27	0.054	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Copper	**13**		0.54	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Iron	**14000**		11	4.5	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Lead	**13**		0.27	0.081	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Magnesium	**8500**	**B**	5.4	1.1	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Manganese	**180**		0.54	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Nickel	**18**		0.54	0.11	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Potassium	**2200**		27	1.6	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Selenium	<0.54		0.54	0.19	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Silver	<0.27		0.27	0.020	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Sodium	**400**		54	7.3	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Thallium	<0.54		0.54	0.23	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Vanadium	**22**		0.27	0.040	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	1
Zinc	**41**		1.1	0.22	mg/Kg	☼	03/25/14 16:00	03/26/14 18:47	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		04/02/14 09:00	04/02/14 19:57	1
Lead	<0.0075		0.0075	0.0075	mg/L		04/02/14 09:00	04/02/14 19:57	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-6

Client Sample ID: 2471-7-B01
Date Collected: 03/24/14 15:20
Date Received: 03/24/14 16:42

Lab Sample ID: 500-73777-16
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.16	J	0.50	0.050	mg/L		03/28/14 09:00	03/28/14 20:50	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/28/14 09:00	03/28/14 20:50	1
Boron	0.49		0.10	0.050	mg/L		03/28/14 09:00	03/28/14 20:50	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/28/14 09:00	03/28/14 20:50	1
Chromium	0.013	J	0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:50	1
Cobalt	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:50	1
Iron	11	B	0.20	0.20	mg/L		03/28/14 09:00	03/28/14 20:50	1
Lead	0.024		0.0075	0.0075	mg/L		03/28/14 09:00	03/28/14 20:50	1
Manganese	0.12		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:50	1
Nickel	0.011	J	0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:50	1
Selenium	<0.050		0.050	0.010	mg/L		03/28/14 09:00	03/28/14 20:50	1
Silver	<0.025		0.025	0.010	mg/L		03/28/14 09:00	03/28/14 20:50	1
Zinc	0.060	J B	0.10	0.020	mg/L		03/28/14 09:00	03/28/14 20:50	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		03/28/14 09:00	03/31/14 19:03	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/28/14 09:00	03/31/14 19:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000020	J	0.00020	0.000020	mg/L		03/28/14 14:45	03/31/14 11:01	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.017	0.0068	mg/Kg	☼	03/25/14 15:00	03/26/14 12:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.09		0.200	0.200	SU			03/31/14 15:36	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-73777-6

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

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

Metals

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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: Olympia Fields, Cook Co. Project No.: IDOT 2013-060 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** KAM ZK

COC No.: 1 of 1

Lab Job No.: 500-73777

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
16	2471-7-B01	3/24/14	3:20	S	X	X					X	X	X	X						0-3'

Relinquished by: Kevin A Mayer	Date/Time 3/24/14 4:42	Received by: Theresa Krato	Date/Time 3/24/14 1642
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Illinois Environmental Protection Agency

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

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

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

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

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

I. Source Location Information

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

Project Name: FAU 3778 (Crawford Ave at 203rd Street) Office Phone Number, if available: _____

Physical Site Location (address, incldluding number and street):
20300-20400 Block of Crawford Ave

City: Olympia Fields State: IL Zip Code: 60461

County: Cook Township: Rich

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

Latitude: 41.51918 (Decimal Degrees) Longitude: -87.71309 (-Decimal Degrees)

Identify how the lat/long data were determined:

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

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

II. Owner/Operator Information for Source Site

Site Owner		Site Operator	
Name:	Illinois Department of Transportation	Name:	Illinois Department of Transportation
Street Address:	201 West Center Court	Street Address:	201 West Center Court
PO Box:		PO Box:	
City:	Schaumburg State: IL	City:	Schaumburg State: IL
Zip Code:	60196-1096 Phone: 847-705-4101	Zip Code:	60196-1096 Phone: 847-705-4101
Contact:	Sam Mead	Contact:	Sam Mead
Email, if available:	Sam.Mead@illinois.gov	Email, if available:	Sam.Mead@illinois.gov

Project Name: FAU 3778 (Crawford Ave at 203rd Street)

Latitude: 41.51918 Longitude: -87.71309

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 appropriately located 35 Ill. Adm. Code 1100.610(a)]:

LOCATIONS 2471-8-B02 & -B03 WERE SAMPLED ADJACENT TO SITE 2471-8. SEE TABLE 3h AND FIGURE 2 OF THE REVISED 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 JOB ID NO.: 500-72414-4

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

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

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

Company Name: IDOT Bureau of Design and Environment

Street Address: 2300 South Dirksen Parkway

City: Springfield State: IL Zip Code: 62764

Phone: 217.785.4246

Steven Gobelman
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

6/3/14
Date:

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

STEVEN GOBELMAN
196-000598
LICENSED
PROFESSIONAL
GEOLOGIST
STATE OF ILLINOIS

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
m-Xylene
o-Xylene
p-Xylene
Semivolatile Organic Compounds (mg/kg)
1,2,4-Trichlorobenzene
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
2,4,5-Trichlorophenol
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
2,4-Dinitrophenol
2,4-Dinitrotoluene
2,6-Dinitrotoluene
2-Chloronaphthalene
2-Chlorophenol
2-Methylnaphthalene
2-Methylphenol
2-Nitroaniline
2-Nitrophenol
3,3´-Dichlorobenzidine
3-Nitroaniline
4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol
4-Chloroaniline
4-Chlorophenyl phenyl ether
4-Methylphenol
4-Nitroaniline
4-Nitrophenol
Acenaphthene
Acenaphthylene
Anthracene
Benzo (a) anthracene
Benzo (a) pyrene

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Semivolatile Organic Compounds (mg/kg) (cont.)
Benzo (b) fluoranthene
Benzo (g,h,i) perylene
Benzo (k) fluoranthene
Bis(2-chloroethoxy)methane
Bis(2-chloroethyl)ether
bis(2-chloroisopropyl)ether
Bis(2-ethylhexyl)phthalate
Butyl benzyl phthalate
Carbazole
Chrysene
Dibenzo (a,h) anthracene
Dibenzofuran
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
Di-n-octyl phthalate
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachlorocyclopentadiene
Hexachloroethane
Indeno (1,2,3-cd) pyrene
Isophorone
Naphthalene
Nitrobenzene
N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine
Pentachlorophenol
Phenanthrene
Phenol
Pyrene
Inorganic Compounds, Total (mg/kg)
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Calcium
Chromium
Cobalt
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Potassium
Selenium
Silver
Sodium
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 2471-8

Agricultural Land

Sample ID	2471-8-B02		2471-8-B03		[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	[7] Most Stringent TACO Tier 1 Residential Objective
Sample Depth (ft)	0-2		0-2								
Sample Date	2/28/2014		2/28/2014								
PID	0		0								
Sample pH	8.01		8.43								
Matrix	Soil		Soil								
Semivolatile Organic Compounds (mg/kg)											
Benzo(a)pyrene	**0.12**	**1,2,***	**J 0.015**		0.09	0.09	0.98	1.3	2.1	NA	0.98

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: 500-72414-4
Client Project/Site: IDOT - Olympia Fields - WO 060

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

Attn: Mike Nelson

Authorized for release by:
3/18/2014 3:11:30 PM

Richard Wright, Senior Project Manager
(708)534-5200
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Client Sample ID: 2471-8-B02
Date Collected: 02/28/14 09:10
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-13
Matrix: Solid
Percent Solids: 89.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<0.0049		0.0049	0.0021	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Benzene	<0.0049		0.0049	0.00067	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Bromodichloromethane	<0.0049		0.0049	0.00084	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Bromoform	<0.0049		0.0049	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Bromomethane	<0.0049		0.0049	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
2-Butanone (MEK)	<0.0049		0.0049	0.0018	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Carbon disulfide	<0.0049		0.0049	0.00073	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Carbon tetrachloride	<0.0049		0.0049	0.00089	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Chlorobenzene	<0.0049		0.0049	0.00049	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Chloroethane	<0.0049	*	0.0049	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Chloroform	<0.0049		0.0049	0.00056	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Chloromethane	<0.0049		0.0049	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
cis-1,2-Dichloroethene	<0.0049		0.0049	0.00069	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
cis-1,3-Dichloropropene	<0.0049		0.0049	0.00064	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Dibromochloromethane	<0.0049		0.0049	0.00085	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
1,1-Dichloroethane	<0.0049		0.0049	0.00077	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
1,2-Dichloroethane	<0.0049		0.0049	0.00072	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
1,1-Dichloroethene	<0.0049		0.0049	0.00079	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
1,2-Dichloropropane	<0.0049		0.0049	0.00074	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
1,3-Dichloropropene, Total	<0.0049		0.0049	0.00064	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Ethylbenzene	<0.0049		0.0049	0.00098	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
2-Hexanone	<0.0049		0.0049	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Methylene Chloride	<0.0049		0.0049	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
4-Methyl-2-pentanone (MIBK)	<0.0049		0.0049	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Methyl tert-butyl ether	<0.0049		0.0049	0.00080	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Styrene	<0.0049	*	0.0049	0.00064	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
1,1,2,2-Tetrachloroethane	<0.0049		0.0049	0.00098	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Tetrachloroethene	<0.0049		0.0049	0.00074	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Toluene	<0.0049		0.0049	0.00068	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
trans-1,2-Dichloroethene	<0.0049		0.0049	0.00067	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
trans-1,3-Dichloropropene	<0.0049		0.0049	0.00087	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
1,1,1-Trichloroethane	<0.0049		0.0049	0.00073	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
1,1,2-Trichloroethane	<0.0049		0.0049	0.00066	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Trichloroethene	<0.0049		0.0049	0.00080	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Vinyl acetate	<0.0049		0.0049	0.00077	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Vinyl chloride	<0.0049		0.0049	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1
Xylenes, Total	<0.0097		0.0097	0.00044	mg/Kg	☼	02/28/14 14:25	03/04/14 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 122*	*02/28/14 14:25*	*03/04/14 17:02*	*1*
Dibromofluoromethane	*108*		*75 - 120*	*02/28/14 14:25*	*03/04/14 17:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*70 - 134*	*02/28/14 14:25*	*03/04/14 17:02*	*1*
Toluene-d8 (Surr)	*103*		*75 - 122*	*02/28/14 14:25*	*03/04/14 17:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.18		0.18	0.082	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Bis(2-chloroethyl)ether	<0.18		0.18	0.055	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
1,3-Dichlorobenzene	<0.18		0.18	0.041	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
1,4-Dichlorobenzene	<0.18		0.18	0.047	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-4

Client Sample ID: 2471-8-B02
Date Collected: 02/28/14 09:10
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-13
Matrix: Solid
Percent Solids: 89.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.18		0.18	0.044	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
2-Methylphenol	<0.18		0.18	0.059	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
2,2'-oxybis[1-chloropropane]	<0.18		0.18	0.043	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
N-Nitrosodi-n-propylamine	<0.18		0.18	0.045	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Hexachloroethane	<0.18		0.18	0.056	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
2-Chlorophenol	<0.18		0.18	0.063	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Nitrobenzene	<0.037		0.037	0.0092	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Bis(2-chloroethoxy)methane	<0.18		0.18	0.038	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
1,2,4-Trichlorobenzene	<0.18		0.18	0.040	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Isophorone	<0.18		0.18	0.041	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
2,4-Dimethylphenol	<0.37		0.37	0.14	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Hexachlorobutadiene	<0.18		0.18	0.058	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Naphthalene	**0.015**	**J**	0.037	0.0057	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
2,4-Dichlorophenol	<0.37		0.37	0.087	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
4-Chloroaniline	<0.74	*	0.74	0.17	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
2,4,6-Trichlorophenol	<0.37		0.37	0.13	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
2,4,5-Trichlorophenol	<0.37		0.37	0.084	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Hexachlorocyclopentadiene	<0.74		0.74	0.21	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
2-Methylnaphthalene	**0.024**	**J**	0.037	0.0068	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
2-Nitroaniline	<0.18		0.18	0.050	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
2-Chloronaphthalene	<0.18		0.18	0.041	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
4-Chloro-3-methylphenol	<0.37		0.37	0.13	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
2,6-Dinitrotoluene	<0.18		0.18	0.072	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
2-Nitrophenol	<0.37		0.37	0.087	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
3-Nitroaniline	<0.37		0.37	0.11	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Dimethyl phthalate	<0.18		0.18	0.048	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
2,4-Dinitrophenol	<0.74		0.74	0.65	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Acenaphthylene	<0.037		0.037	0.0049	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
2,4-Dinitrotoluene	<0.18		0.18	0.058	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Acenaphthene	<0.037		0.037	0.0066	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Dibenzofuran	<0.18		0.18	0.043	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
4-Nitrophenol	<0.74		0.74	0.35	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Fluorene	<0.037		0.037	0.0052	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
4-Nitroaniline	<0.37		0.37	0.15	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
4-Bromophenyl phenyl ether	<0.18		0.18	0.049	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Hexachlorobenzene	<0.074		0.074	0.0085	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Diethyl phthalate	<0.18		0.18	0.062	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
4-Chlorophenyl phenyl ether	<0.18		0.18	0.043	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Pentachlorophenol	<0.74		0.74	0.59	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
N-Nitrosodiphenylamine	<0.18		0.18	0.043	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
4,6-Dinitro-2-methylphenol	<0.37		0.37	0.30	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Phenanthrene	**0.10**		0.037	0.0051	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Anthracene	**0.023**	**J**	0.037	0.0061	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Carbazole	<0.18	*	0.18	0.095	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Di-n-butyl phthalate	<0.18		0.18	0.056	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Fluoranthene	**0.19**		0.037	0.0068	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Pyrene	**0.19**		0.037	0.0073	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Butyl benzyl phthalate	<0.18		0.18	0.070	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Benzo[a]anthracene	**0.13**		0.037	0.0050	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1

Client Sample ID: 2471-8-B02
Date Collected: 02/28/14 09:10
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-13
Matrix: Solid
Percent Solids: 89.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.17**		0.037	0.010	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
3,3'-Dichlorobenzidine	<0.18		0.18	0.052	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Bis(2-ethylhexyl) phthalate	<0.18		0.18	0.067	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Di-n-octyl phthalate	<0.18		0.18	0.060	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Benzo[b]fluoranthene	**0.17**		0.037	0.0079	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Benzo[k]fluoranthene	**0.087**		0.037	0.011	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Benzo[a]pyrene	**0.12**		0.037	0.0071	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Indeno[1,2,3-cd]pyrene	**0.094**		0.037	0.0095	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Dibenz(a,h)anthracene	**0.029**	**J**	0.037	0.0071	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
Benzo[g,h,i]perylene	**0.13**		0.037	0.012	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1
3 & 4 Methylphenol	<0.18		0.18	0.061	mg/Kg	☼	03/06/14 06:51	03/07/14 01:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*57*		*25 - 110*	*03/06/14 06:51*	*03/07/14 01:05*	*1*
Phenol-d5	*71*		*31 - 110*	*03/06/14 06:51*	*03/07/14 01:05*	*1*
Nitrobenzene-d5	*60*		*25 - 115*	*03/06/14 06:51*	*03/07/14 01:05*	*1*
2-Fluorobiphenyl	*66*		*25 - 119*	*03/06/14 06:51*	*03/07/14 01:05*	*1*
2,4,6-Tribromophenol	*76*		*35 - 137*	*03/06/14 06:51*	*03/07/14 01:05*	*1*
Terphenyl-d14	*78*		*36 - 134*	*03/06/14 06:51*	*03/07/14 01:05*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.1		1.1	0.44	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Arsenic	**3.2**		0.55	0.11	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Barium	**40**		0.55	0.059	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Beryllium	**0.30**		0.22	0.044	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Boron	**8.0**		2.7	0.55	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Cadmium	**0.48**		0.11	0.014	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Calcium	**100000**	**B**	110	30	mg/Kg	☼	03/05/14 09:15	03/07/14 11:16	10
Chromium	**11**		0.55	0.064	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Cobalt	**3.4**		0.27	0.055	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Copper	**12**		0.55	0.11	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Iron	**8700**		11	4.5	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Lead	**96**	**B**	0.27	0.082	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Magnesium	**68000**	**B**	55	11	mg/Kg	☼	03/05/14 09:15	03/07/14 11:16	10
Manganese	**330**		0.55	0.11	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Nickel	**7.1**		0.55	0.11	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Potassium	**1100**		27	1.7	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Selenium	<0.55		0.55	0.19	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Silver	<0.27		0.27	0.020	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Sodium	**1500**		55	7.4	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Thallium	**0.23**	**J**	0.55	0.23	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Vanadium	**9.6**		0.27	0.041	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1
Zinc	**41**		1.1	0.22	mg/Kg	☼	03/05/14 09:15	03/06/14 17:37	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/17/14 06:45	03/17/14 22:39	1
Chromium	<0.025		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 22:39	1
Iron	<0.20		0.20	0.20	mg/L		03/17/14 06:45	03/17/14 22:39	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-4

Client Sample ID: 2471-8-B02
Date Collected: 02/28/14 09:10
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-13
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.0075		0.0075	0.0075	mg/L		03/17/14 06:45	03/17/14 22:39	1
Manganese	**0.35**		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 22:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**0.42**	**J**	0.50	0.050	mg/L		03/10/14 18:00	03/11/14 14:00	1
Beryllium	**0.0047**		0.0040	0.0040	mg/L		03/10/14 18:00	03/11/14 14:00	1
Boron	**1.6**	**B**	0.15	0.050	mg/L		03/10/14 18:00	03/11/14 14:00	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/10/14 18:00	03/11/14 14:00	1
Chromium	**0.13**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 14:00	1
Cobalt	**0.037**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 14:00	1
Iron	**110**		0.20	0.20	mg/L		03/10/14 18:00	03/11/14 14:00	1
Lead	**0.25**		0.0075	0.0075	mg/L		03/10/14 18:00	03/11/14 14:00	1
Manganese	**0.78**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 14:00	1
Nickel	**0.10**		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 14:00	1
Selenium	<0.050		0.050	0.010	mg/L		03/10/14 18:00	03/11/14 14:00	1
Silver	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 14:00	1
Zinc	**0.36**		0.10	0.020	mg/L		03/10/14 18:00	03/11/14 14:00	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		03/10/14 18:00	03/11/14 16:36	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/10/14 18:00	03/14/14 12:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00019**	**J**	0.00020	0.000020	mg/L		03/10/14 17:00	03/11/14 12:32	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.020**		0.017	0.0067	mg/Kg	☼	03/03/14 15:30	03/04/14 11:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	**8.01**		0.200	0.200	SU			03/04/14 13:49	1

Client Sample ID: 2471-8-B03
Date Collected: 02/28/14 09:25
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-14
Matrix: Solid
Percent Solids: 79.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0055		0.0055	0.0024	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Benzene	<0.0055		0.0055	0.00075	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Bromodichloromethane	<0.0055		0.0055	0.00094	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Bromoform	<0.0055		0.0055	0.0013	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Bromomethane	<0.0055		0.0055	0.0017	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
2-Butanone (MEK)	<0.0055		0.0055	0.0020	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Carbon disulfide	<0.0055		0.0055	0.00082	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Carbon tetrachloride	<0.0055		0.0055	0.0010	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Chlorobenzene	<0.0055		0.0055	0.00056	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Chloroethane	<0.0055	*	0.0055	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Chloroform	<0.0055		0.0055	0.00063	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Chloromethane	<0.0055		0.0055	0.0012	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
cis-1,2-Dichloroethene	<0.0055		0.0055	0.00078	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
cis-1,3-Dichloropropene	<0.0055		0.0055	0.00072	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Dibromochloromethane	<0.0055		0.0055	0.00095	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
1,1-Dichloroethane	<0.0055		0.0055	0.00087	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
1,2-Dichloroethane	<0.0055		0.0055	0.00081	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
1,1-Dichloroethene	<0.0055		0.0055	0.00089	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
1,2-Dichloropropane	<0.0055		0.0055	0.00083	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
1,3-Dichloropropene, Total	<0.0055		0.0055	0.00072	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Ethylbenzene	<0.0055		0.0055	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
2-Hexanone	<0.0055		0.0055	0.0016	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Methylene Chloride	<0.0055		0.0055	0.0015	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
4-Methyl-2-pentanone (MIBK)	<0.0055		0.0055	0.0014	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Methyl tert-butyl ether	<0.0055		0.0055	0.00091	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Styrene	<0.0055	*	0.0055	0.00072	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
1,1,2,2-Tetrachloroethane	<0.0055		0.0055	0.0011	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Tetrachloroethene	<0.0055		0.0055	0.00084	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Toluene	<0.0055		0.0055	0.00077	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
trans-1,2-Dichloroethene	<0.0055		0.0055	0.00076	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
trans-1,3-Dichloropropene	<0.0055		0.0055	0.00098	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
1,1,1-Trichloroethane	<0.0055		0.0055	0.00082	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
1,1,2-Trichloroethane	<0.0055		0.0055	0.00075	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Trichloroethene	<0.0055		0.0055	0.00091	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Vinyl acetate	<0.0055		0.0055	0.00086	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Vinyl chloride	<0.0055		0.0055	0.0012	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1
Xylenes, Total	<0.011		0.011	0.00050	mg/Kg	☼	02/28/14 14:25	03/04/14 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 122*	*02/28/14 14:25*	*03/04/14 17:25*	*1*
Dibromofluoromethane	*109*		*75 - 120*	*02/28/14 14:25*	*03/04/14 17:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*70 - 134*	*02/28/14 14:25*	*03/04/14 17:25*	*1*
Toluene-d8 (Surr)	*108*		*75 - 122*	*02/28/14 14:25*	*03/04/14 17:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	<0.20		0.20	0.090	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Bis(2-chloroethyl)ether	<0.20		0.20	0.061	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
1,3-Dichlorobenzene	<0.20		0.20	0.046	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
1,4-Dichlorobenzene	<0.20		0.20	0.052	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-4

Client Sample ID: 2471-8-B03
Date Collected: 02/28/14 09:25
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-14
Matrix: Solid
Percent Solids: 79.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	<0.20		0.20	0.049	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
2-Methylphenol	<0.20		0.20	0.065	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
2,2'-oxybis[1-chloropropane]	<0.20		0.20	0.047	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
N-Nitrosodi-n-propylamine	<0.20		0.20	0.050	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Hexachloroethane	<0.20		0.20	0.062	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
2-Chlorophenol	<0.20		0.20	0.069	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Nitrobenzene	<0.040		0.040	0.010	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Bis(2-chloroethoxy)methane	<0.20		0.20	0.042	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
1,2,4-Trichlorobenzene	<0.20		0.20	0.044	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Isophorone	<0.20		0.20	0.046	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
2,4-Dimethylphenol	<0.40		0.40	0.15	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Hexachlorobutadiene	<0.20		0.20	0.064	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Naphthalene	<0.040		0.040	0.0063	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
2,4-Dichlorophenol	<0.40		0.40	0.097	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
4-Chloroaniline	<0.82	*	0.82	0.19	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
2,4,6-Trichlorophenol	<0.40		0.40	0.14	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
2,4,5-Trichlorophenol	<0.40		0.40	0.093	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Hexachlorocyclopentadiene	<0.82		0.82	0.23	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
2-Methylnaphthalene	<0.040		0.040	0.0075	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
2-Nitroaniline	<0.20		0.20	0.055	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
2-Chloronaphthalene	<0.20		0.20	0.045	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
4-Chloro-3-methylphenol	<0.40		0.40	0.14	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
2,6-Dinitrotoluene	<0.20		0.20	0.080	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
2-Nitrophenol	<0.40		0.40	0.096	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
3-Nitroaniline	<0.40		0.40	0.13	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Dimethyl phthalate	<0.20		0.20	0.053	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
2,4-Dinitrophenol	<0.82		0.82	0.72	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Acenaphthylene	<0.040		0.040	0.0054	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
2,4-Dinitrotoluene	<0.20		0.20	0.065	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Acenaphthene	<0.040		0.040	0.0073	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Dibenzofuran	<0.20		0.20	0.048	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
4-Nitrophenol	<0.82		0.82	0.39	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Fluorene	<0.040		0.040	0.0057	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
4-Nitroaniline	<0.40		0.40	0.17	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
4-Bromophenyl phenyl ether	<0.20		0.20	0.054	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Hexachlorobenzene	<0.082		0.082	0.0094	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Diethyl phthalate	<0.20		0.20	0.069	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
4-Chlorophenyl phenyl ether	<0.20		0.20	0.048	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Pentachlorophenol	<0.82		0.82	0.65	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
N-Nitrosodiphenylamine	<0.20		0.20	0.048	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
4,6-Dinitro-2-methylphenol	<0.40		0.40	0.33	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Phenanthrene	**0.028**	**J**	0.040	0.0057	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Anthracene	<0.040		0.040	0.0068	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Carbazole	<0.20	*	0.20	0.11	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Di-n-butyl phthalate	<0.20		0.20	0.062	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Fluoranthene	**0.036**	**J**	0.040	0.0075	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Pyrene	**0.025**	**J**	0.040	0.0081	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Butyl benzyl phthalate	<0.20		0.20	0.077	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Benzo[a]anthracene	**0.022**	**J**	0.040	0.0055	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1

Client Sample ID: 2471-8-B03
Date Collected: 02/28/14 09:25
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-14
Matrix: Solid
Percent Solids: 79.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	**0.021**	**J**	0.040	0.011	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
3,3'-Dichlorobenzidine	<0.20		0.20	0.057	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Bis(2-ethylhexyl) phthalate	<0.20		0.20	0.074	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Di-n-octyl phthalate	<0.20		0.20	0.066	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Benzo[b]fluoranthene	**0.024**	**J**	0.040	0.0088	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Benzo[k]fluoranthene	<0.040		0.040	0.012	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Benzo[a]pyrene	**0.015**	**J**	0.040	0.0079	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Indeno[1,2,3-cd]pyrene	<0.040		0.040	0.011	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Dibenz(a,h)anthracene	<0.040		0.040	0.0079	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
Benzo[g,h,i]perylene	**0.016**	**J**	0.040	0.013	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1
3 & 4 Methylphenol	<0.20		0.20	0.068	mg/Kg	☼	03/06/14 06:51	03/07/14 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*45*		*25 - 110*	*03/06/14 06:51*	*03/07/14 01:27*	*1*
Phenol-d5	*55*		*31 - 110*	*03/06/14 06:51*	*03/07/14 01:27*	*1*
Nitrobenzene-d5	*46*		*25 - 115*	*03/06/14 06:51*	*03/07/14 01:27*	*1*
2-Fluorobiphenyl	*52*		*25 - 119*	*03/06/14 06:51*	*03/07/14 01:27*	*1*
2,4,6-Tribromophenol	*76*		*35 - 137*	*03/06/14 06:51*	*03/07/14 01:27*	*1*
Terphenyl-d14	*68*		*36 - 134*	*03/06/14 06:51*	*03/07/14 01:27*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<1.2		1.2	0.50	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Arsenic	**6.3**		0.62	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Barium	**130**		0.62	0.067	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Beryllium	**0.86**		0.25	0.050	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Boron	**8.1**		3.1	0.62	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Cadmium	<0.12		0.12	0.016	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Calcium	**2900**	**B**	12	3.4	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Chromium	**24**		0.62	0.072	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Cobalt	**9.9**		0.31	0.062	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Copper	**20**		0.62	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Iron	**23000**		12	5.1	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Lead	**10**	**B**	0.31	0.093	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Magnesium	**5800**	**B**	6.2	1.3	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Manganese	**420**		0.62	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Nickel	**36**		0.62	0.12	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Potassium	**2400**		31	1.9	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Selenium	**0.34**	**J**	0.62	0.22	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Silver	<0.31		0.31	0.023	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Sodium	**880**		62	8.3	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Thallium	**0.46**	**J**	0.62	0.26	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Vanadium	**27**		0.31	0.046	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1
Zinc	**43**		1.2	0.25	mg/Kg	☼	03/05/14 09:15	03/06/14 17:44	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	**0.70**		0.10	0.050	mg/L		03/17/14 06:45	03/17/14 22:44	1
Iron	<0.20		0.20	0.20	mg/L		03/17/14 06:45	03/17/14 22:44	1
Lead	<0.0075		0.0075	0.0075	mg/L		03/17/14 06:45	03/17/14 22:44	1

Client: Andrews Engineering Inc.
Project/Site: IDOT - Olympia Fields - WO 060

TestAmerica Job ID: 500-72414-4

Client Sample ID: 2471-8-B03
Date Collected: 02/28/14 09:25
Date Received: 02/28/14 12:44

Lab Sample ID: 500-72414-14
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.21		0.025	0.010	mg/L		03/17/14 06:45	03/17/14 22:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.46	J	0.50	0.050	mg/L		03/10/14 18:00	03/11/14 14:07	1
Beryllium	<0.0040		0.0040	0.0040	mg/L		03/10/14 18:00	03/11/14 14:07	1
Boron	2.2	B	0.15	0.050	mg/L		03/10/14 18:00	03/11/14 14:07	1
Cadmium	<0.0050		0.0050	0.0020	mg/L		03/10/14 18:00	03/11/14 14:07	1
Chromium	0.074		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 14:07	1
Cobalt	0.011	J	0.025	0.010	mg/L		03/10/14 18:00	03/11/14 14:07	1
Iron	55		0.20	0.20	mg/L		03/10/14 18:00	03/11/14 14:07	1
Lead	0.021		0.0075	0.0075	mg/L		03/10/14 18:00	03/11/14 14:07	1
Manganese	0.22		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 14:07	1
Nickel	0.059		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 14:07	1
Selenium	<0.050		0.050	0.010	mg/L		03/10/14 18:00	03/11/14 14:07	1
Silver	<0.025		0.025	0.010	mg/L		03/10/14 18:00	03/11/14 14:07	1
Zinc	0.18		0.10	0.020	mg/L		03/10/14 18:00	03/11/14 14:07	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		03/10/14 18:00	03/11/14 16:39	1
Thallium	<0.0020		0.0020	0.0020	mg/L		03/10/14 18:00	03/11/14 16:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000061	J	0.00020	0.000020	mg/L		03/10/14 17:00	03/11/14 12:34	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.057		0.020	0.0079	mg/Kg	☼	03/03/14 15:30	03/04/14 12:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	8.43		0.200	0.200	SU			03/04/14 13:53	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

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

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
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: Olympia Fields, Cook Co. Project No.: IDOT 2013-060 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** CK / KAM

COC No.: 1 of 1

Lab Job No.: 500-72414-

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
12	2471-8-B01	2/28/14	9:00	S	X	X					X	X	X	X						0-2'
13	2471-8-B02	2/28/14	9:10	S	X	X					X	X	X	X						0-2'
14	2471-8-B03	2/28/14	9:25	S	X	X					X	X	X	X						0-2'

Relinquished by: Kelli A. Hume (AEI)	Date/Time 2/28/14 12:44	Received by: Melissa Scott	Date/Time 2/28/14 1244
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time