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: FAI 55 (I-55) @ Lake Shore Drive Office Phone Number, if available: _____

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

Lake Shore Drive, 18th Street to 31st Street

City: Chicago State: IL Zip Code: 60616

County: Cook Township: Chicago

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

Latitude: 41.84876 (Decimal Degrees) Longitude: -87.61279 (-Decimal Degrees)

Identify how the lat/long data were determined:

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

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

II. Owner/Operator Information for Source Site

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

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAI 55 (I-55) @ Lake Shore Drive

Latitude: 41.84876 Longitude: -87.61279

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)]:

SOIL BORINGS 2045-2-B01, -B15 THRU -B17, -B21, & -B24 WERE SAMPLED ADJACENT TO SITE 2045-2. SEE FIGURES 3 THRU 5 AND TABLE 3a 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]:

TEKLAB WORK ORDER ID NO.'S: 14051252, 14051472, & 14051543.

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:

12/1/14
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.

- If all samples at a site were below the most stringent MAC, the notation **“No Contaminants of Concern Noted”** is used.

The laboratory report for site soils follows this summary table.

ISGS Site 2045-2
Lake Shore Drive

Sample ID	2045-2-B01-1		2045-2-B01-2		2045-2-B01-3		2045-2-B15		[1] Most Stringent MAC	[2] Outside a Populated Area MAC	[3] Populated non-Metropolitan Statistical Area MAC	[4] Within Chicago Corporate Limits MAC	[5] Metropolitan Statistical Area MAC	[6] Class I Soil TCLP/SPLP Comparisons Only
Sample Depth (ft)	0-8		8-16		16-24		0-8							
Sample Date	5/28/2014		5/28/2014		5/28/2014		5/21/2014							
PID	0		0		0		0							
Sample pH	8.08		8.85		8.47		8.34							
Matrix	Soil		Soil		Soil		Soil							
Semivolatile Organic Compounds (mg/kg)														
Benzo(a)anthracene	ND		ND		ND		ND		0.9	0.9	0.9	1.1	1.8	NA
Benzo(a)pyrene	ND		ND		ND		ND		0.09	0.09	0.98	1.3	2.1	NA
Benzo(b)fluoranthene	ND		ND		ND		ND		0.9	0.9	0.9	1.5	2.1	NA

Sample ID	2045-2-B16		2045-2-B16 DUP		2045-2-B17		2045-2-B21		2045-2-B24		[1] Most Stringent MAC	[2] Outside a Populated Area MAC	[3] Populated non-Metropolitan Statistical Area MAC	[4] Within Chicago Corporate Limits MAC	[5] Metropolitan Statistical Area MAC	[6] Class I Soil TCLP/SPLP Comparisons Only
Sample Depth (ft)	0-8		0-8		0-8		0-3.5		0-3.5							
Sample Date	5/22/2014		5/22/2014		5/22/2014		5/28/2014		5/28/2014							
PID	0		0		0		0		0							
Sample pH	7.76		8.16		8.93		8.6		8.95							
Matrix	Soil		Soil		Soil		Soil		Soil							
Semivolatile Organic Compounds (mg/kg)																
Benzo(a)anthracene	ND		ND		ND		**0.198**		**0.984**	**1,2,3**	0.9	0.9	0.9	1.1	1.8	NA
Benzo(a)pyrene	ND		ND		ND		**J 0.172**	**1,2**	**0.863**	**1,2**	0.09	0.09	0.98	1.3	2.1	NA
Benzo(b)fluoranthene	ND		ND		ND		**0.202**		**0.958**	**1,2,3**	0.9	0.9	0.9	1.5	2.1	NA

June 03, 2014

Colleen Grey
Andrews Engineering, Inc.
3300 Ginger Creek Drive
Springfield, IL 62711-7233
TEL: (217) 787-2334
FAX: (217) 787-9495

RE: IDOT2013-080 **WorkOrder:** 14051252

Dear Colleen Grey:

TEKLAB, INC received 25 samples on 5/22/2014 10:52:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Shelly A Hennessy

Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com

Report Contents

Client: Andrews Engineering, Inc.
Work Order: 14051252
Client Project: IDOT2013-080
Report Date: 03-Jun-14

This reporting package includes the following:

Client: Andrews Engineering, Inc. **Work Order:** 14051252

Client Project: IDOT2013-080 **Report Date:** 03-Jun-14

Abbr Definition

CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.
DNI	Did not ignite
DUP	Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MB	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TNTC	Too numerous to count (> 200 CFU)

Qualifiers

# -	Unknown hydrocarbon	B -	Analyte detected in associated Method Blank
E -	Value above quantitation range	H -	Holding times exceeded
J -	Analyte detected below quantitation limits	M -	Manual Integration used to determine area response
ND -	Not Detected at the Reporting Limit	R -	RPD outside accepted recovery limits
S -	Spike Recovery outside recovery limits	X -	Value exceeds Maximum Contaminant Level

Case Narrative

http://www.teklabinc.com/

Client: Andrews Engineering, Inc.
Work Order: 14051252
Client Project: IDOT2013-080
Report Date: 03-Jun-14

Cooler Receipt Temp: 5.6 °C

Locations and Accreditations

	Collinsville	Springfield	Kansas City	Collinsville Air
Address	5445 Horseshoe Lake Road	3920 Pintail Dr	8421 Nieman Road	5445 Horseshoe Lake Road
	Collinsville, IL 62234-7425	Springfield, IL 62711-9415	Lenexa, KS 66214	Collinsville, IL 62234-7425
Phone	(618) 344-1004	(217) 698-1004	(913) 541-1998	(618) 344-1004
Fax	(618) 344-1005	(217) 698-1005	(913) 541-1998	(618) 344-1005
Email	jhriley@teklabinc.com	KKlostermann@teklabinc.com	dthompson@teklabinc.com	EHurley@teklabinc.com

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2015	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2015	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2014	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2014	Collinsville
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2014	Collinsville
Arkansas	ADEQ	88-0966		3/14/2015	Collinsville
Illinois	IDPH	17584		5/31/2015	Collinsville
Kentucky	UST	0073		1/31/2015	Collinsville
Missouri	MDNR	00930		5/31/2015	Collinsville
Oklahoma	ODEQ	9978		8/31/2014	Collinsville

Client: Andrews Engineering, Inc. **Work Order:** 14051252

Client Project: IDOT2013-080 **Report Date:** 03-Jun-14

Lab ID: 14051252-025 **Client Sample ID:** 2045-2-B15

Matrix: SOLID **Collection Date:** 05/21/2014 14:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		**8.8**	%	1	05/23/2014 13:43	R191155
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		**91.2**	%	1	05/23/2014 13:43	R191155
SW-846 9045C									
pH (1:1)	NELAP	0	1		**8.34**		1	05/23/2014 12:17	R191118
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		**< 0.05**	mg/L	1	05/27/2014 16:08	99111
Beryllium	NELAP	0.0003	0.001		**< 0.001**	mg/L	1	05/27/2014 16:08	99111
Boron	NELAP	0.0055	0.02	J	**0.0083**	mg/L	1	05/27/2014 16:08	99111
Cadmium	NELAP	0.0003	0.002		**< 0.002**	mg/L	1	05/27/2014 16:08	99111
Chromium	NELAP	0.004	0.01		**< 0.01**	mg/L	1	05/27/2014 16:08	99111
Cobalt	NELAP	0.0022	0.01		**< 0.01**	mg/L	1	05/27/2014 16:08	99111
Iron	NELAP	0.007	0.02		**0.978**	mg/L	1	05/27/2014 16:08	99111
Lead	NELAP	0.006	0.007		**< 0.007**	mg/L	1	05/27/2014 16:08	99111
Manganese	NELAP	0.0016	0.005		**0.0341**	mg/L	1	05/27/2014 16:08	99111
Nickel	NELAP	0.0033	0.01		**< 0.01**	mg/L	1	05/27/2014 16:08	99111
Selenium	NELAP	0.022	0.05		**< 0.05**	mg/L	1	05/27/2014 16:08	99111
Silver	NELAP	0.003	0.01		**< 0.01**	mg/L	1	05/27/2014 16:08	99111
Zinc	NELAP	0.0021	0.01	J	**0.005**	mg/L	1	05/27/2014 16:08	99111
SW-846 1312, 3020A, 7010 METALS IN SPLP EXTRACT BY GFAA									
Antimony, SPLP by GFAA	NELAP	0.0017	0.005		**< 0.005**	mg/L	1	05/27/2014 15:02	99113
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		**< 0.002**	mg/L	1	05/28/2014 13:06	99113
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		**< 0.0002**	mg/L	1	05/27/2014 14:38	99128
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.36	4.55		**< 4.55**	mg/Kg-dry	1	05/27/2014 13:55	99088
Arsenic	NELAP	1.23	2.45		**3.36**	mg/Kg-dry	1	05/27/2014 18:32	99079
Barium	NELAP	0.25	0.49		**5.03**	mg/Kg-dry	1	05/27/2014 18:32	99079
Beryllium	NELAP	0.05	0.1	J	**0.07**	mg/Kg-dry	1	05/27/2014 18:32	99079
Boron	NELAP	0.98	1.96	J	**1.86**	mg/Kg-dry	1	05/27/2014 18:32	99079
Cadmium	NELAP	0.1	0.2		**< 0.2**	mg/Kg-dry	1	05/27/2014 18:32	99079
Calcium	NELAP	2.45	4.9		**23800**	mg/Kg-dry	1	05/27/2014 18:32	99079
Chromium	NELAP	0.49	0.98		**2.39**	mg/Kg-dry	1	05/27/2014 18:32	99079
Cobalt	NELAP	0.49	0.98		**2.04**	mg/Kg-dry	1	05/27/2014 18:32	99079
Copper	NELAP	0.49	0.98	J	**0.94**	mg/Kg-dry	1	05/27/2014 18:32	99079
Iron	NELAP	0.98	1.96		**4890**	mg/Kg-dry	1	05/27/2014 18:32	99079
Lead	NELAP	1.96	3.92	J	**2.26**	mg/Kg-dry	1	05/27/2014 18:32	99079
Magnesium	NELAP	0.49	0.98		**13100**	mg/Kg-dry	1	05/27/2014 18:32	99079
Manganese	NELAP	0.25	0.49		**143**	mg/Kg-dry	1	05/27/2014 18:32	99079
Nickel	NELAP	0.49	0.98		**2.74**	mg/Kg-dry	1	05/27/2014 18:32	99079
Potassium	NELAP	4.9	9.8		**157**	mg/Kg-dry	1	05/27/2014 18:32	99079
Silver	NELAP	0.49	0.54		**< 0.54**	mg/Kg-dry	1	05/27/2014 18:32	99079
Sodium	NELAP	2.45	4.9		**680**	mg/Kg-dry	1	05/27/2014 18:32	99079
Thallium	NELAP	2.45	2.55		**< 2.55**	mg/Kg-dry	1	05/27/2014 18:32	99079
Vanadium	NELAP	0.49	0.98		**4.47**	mg/Kg-dry	1	05/27/2014 18:32	99079
Zinc	NELAP	0.49	0.98		**10.3**	mg/Kg-dry	1	05/27/2014 18:32	99079

Client: Andrews Engineering, Inc. **Work Order:** 14051252

Client Project: IDOT2013-080 **Report Date:** 03-Jun-14

Lab ID: 14051252-025 **Client Sample ID:** 2045-2-B15

Matrix: SOLID **Collection Date:** 05/21/2014 14:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.337	0.577		**< 0.577**	mg/Kg-dry	1	05/29/2014 10:21	99110
SW-846 7471B									
Mercury	NELAP	0.003	0.011		**< 0.011**	mg/Kg-dry	1	05/23/2014 10:44	99074
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.145	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
1,2-Dichlorobenzene	NELAP	0.173	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
1,3-Dichlorobenzene	NELAP	0.183	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
1,4-Dichlorobenzene	NELAP	0.173	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
2,4,5-Trichlorophenol	NELAP	0.104	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
2,4,6-Trichlorophenol	NELAP	0.137	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
2,4-Dichlorophenol	NELAP	0.132	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
2,4-Dimethylphenol	NELAP	0.138	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
2,4-Dinitrophenol	NELAP	0.117	1.09		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
2,4-Dinitrotoluene	NELAP	0.113	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
2,6-Dinitrotoluene	NELAP	0.118	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
2-Chloronaphthalene	NELAP	0.131	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
2-Chlorophenol	NELAP	0.138	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
2-Methylnaphthalene	NELAP	0.13	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
2-Nitroaniline	NELAP	0.099	1.09		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
2-Nitrophenol	NELAP	0.122	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
3,3´-Dichlorobenzidine	NELAP	0.218	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
3-Nitroaniline	NELAP	0.089	1.09		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
4,6-Dinitro-2-methylphenol	NELAP	0.118	1.09		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
4-Bromophenyl phenyl ether	NELAP	0.1	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
4-Chloro-3-methylphenol	NELAP	0.12	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
4-Chloroaniline	NELAP	0.132	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
4-Chlorophenyl phenyl ether	NELAP	0.108	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
4-Nitroaniline	NELAP	0.099	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
4-Nitrophenol	NELAP	0.107	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Acenaphthene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Acenaphthylene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Anthracene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Benzo(a)anthracene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Benzo(a)pyrene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Benzo(b)fluoranthene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Benzo(g,h,i)perylene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Benzo(k)fluoranthene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Bis(2-chloroethoxy)methane	NELAP	0.128	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Bis(2-chloroethyl)ether	NELAP	0.155	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Bis(2-chloroisopropyl)ether	NELAP	0.124	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Bis(2-ethylhexyl)phthalate	NELAP	0.128	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Butyl benzyl phthalate	NELAP	0.11	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Carbazole		0.133	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Chrysene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Dibenzo(a,h)anthracene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Dibenzofuran	NELAP	0.137	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Diethyl phthalate	NELAP	0.105	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139

Client: Andrews Engineering, Inc. **Work Order:** 14051252

Client Project: IDOT2013-080 **Report Date:** 03-Jun-14

Lab ID: 14051252-025 **Client Sample ID:** 2045-2-B15

Matrix: SOLID **Collection Date:** 05/21/2014 14:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Dimethyl phthalate	NELAP	0.099	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Di-n-butyl phthalate	NELAP	0.112	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Di-n-octyl phthalate	NELAP	0.113	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Fluoranthene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Fluorene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Hexachlorobenzene	NELAP	0.107	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Hexachlorobutadiene	NELAP	0.169	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Hexachlorocyclopentadiene	NELAP	0.111	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Hexachloroethane	NELAP	0.182	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Isophorone	NELAP	0.129	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
m,p-Cresol	NELAP	0.137	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Naphthalene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Nitrobenzene	NELAP	0.136	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
N-Nitroso-di-n-propylamine	NELAP	0.12	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
N-Nitrosodiphenylamine	NELAP	0.1	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
o-Cresol	NELAP	0.129	0.545		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Pentachlorophenol	NELAP	0.719	2.18		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Phenanthrene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Phenol	NELAP	0.126	0.382		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Pyrene	NELAP	0.018	0.037		**ND**	mg/Kg-dry	1	06/01/2014 17:33	99139
Surr: 2,4,6-Tribromophenol		0	33.7-105		**78.2**	%REC	1	06/01/2014 17:33	99139
Surr: 2-Fluorobiphenyl		0	24.2-75.3		**59.5**	%REC	1	06/01/2014 17:33	99139
Surr: 2-Fluorophenol		0	43-85.2		**62.2**	%REC	1	06/01/2014 17:33	99139
Surr: Nitrobenzene-d5		0	35.5-60.5		**55**	%REC	1	06/01/2014 17:33	99139
Surr: Phenol-d5		0	48.9-86.9		**70.9**	%REC	1	06/01/2014 17:33	99139
Surr: p-Terphenyl-d14		0	40.2-101		**72**	%REC	1	06/01/2014 17:33	99139
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
1,1,2,2-Tetrachloroethane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
1,1,2-Trichloroethane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
1,1-Dichloroethane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
1,1-Dichloroethene	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
1,2-Dichloroethane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
1,2-Dichloropropane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
1,3-Dichloropropene, Total		0.001	0.004		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
2-Butanone	NELAP	0.0103	0.052		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
2-Hexanone	NELAP	0.0103	0.052		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
4-Methyl-2-pentanone	NELAP	0.0103	0.052		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Acetone	NELAP	0.0103	0.052	J	**0.014**	mg/Kg-dry	1	05/23/2014 20:17	99123
Benzene	NELAP	0.0005	0.001		**0.004**	mg/Kg-dry	1	05/23/2014 20:17	99123
Bromodichloromethane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Bromoform	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Bromomethane	NELAP	0.0021	0.01		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Carbon disulfide	NELAP	0.0031	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Carbon tetrachloride	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Chlorobenzene	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123

Client: Andrews Engineering, Inc. **Work Order:** 14051252

Client Project: IDOT2013-080 **Report Date:** 03-Jun-14

Lab ID: 14051252-025 **Client Sample ID:** 2045-2-B15

Matrix: SOLID **Collection Date:** 05/21/2014 14:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0021	0.01		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Chloroform	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Chloromethane	NELAP	0.0021	0.01		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
cis-1,2-Dichloroethene	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
cis-1,3-Dichloropropene	NELAP	0.001	0.004		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Dibromochloromethane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Ethylbenzene	NELAP	0.001	0.005	J	**0.003**	mg/Kg-dry	1	05/23/2014 20:17	99123
m,p-Xylenes	NELAP	0.001	0.005	J	**0.004**	mg/Kg-dry	1	05/23/2014 20:17	99123
Methyl tert-butyl ether	NELAP	0.0005	0.002		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Methylene chloride	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
o-Xylene	NELAP	0.001	0.005	J	**0.002**	mg/Kg-dry	1	05/23/2014 20:17	99123
Styrene	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Tetrachloroethene	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Toluene	NELAP	0.001	0.005		**0.009**	mg/Kg-dry	1	05/23/2014 20:17	99123
trans-1,2-Dichloroethene	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
trans-1,3-Dichloropropene	NELAP	0.001	0.004		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Trichloroethene	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Vinyl acetate	NELAP	0.0206	0.052		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Vinyl chloride	NELAP	0.0005	0.002		**ND**	mg/Kg-dry	1	05/23/2014 20:17	99123
Xylenes, Total	NELAP	0.001	0.005	J	**0.005**	mg/Kg-dry	1	05/23/2014 20:17	99123
Surr: 1,2-Dichloroethane-d4		0	72.2-131		**90.2**	%REC	1	05/23/2014 20:17	99123
Surr: 4-Bromofluorobenzene		0	82.1-116		**98.3**	%REC	1	05/23/2014 20:17	99123
Surr: Dibromofluoromethane		0	77.7-120		**101.1**	%REC	1	05/23/2014 20:17	99123
Surr: Toluene-d8		0	86-116		**91.5**	%REC	1	05/23/2014 20:17	99123

Allowable Marginal Exceedance of trans-1,3-Dichloropropene in the LCS verified per 2009 TNI Standard (Volume 1, Module 4, section 1.7.4.2).

ANDREWS ENGINEERING INC

CHAIN OF CUSTODY RECORD

3 of 3

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: **TekLab, Inc.** Address: **5445 Horseshoe Lake Road** **Collinsville, IL 62234** Phone: **877-344-1003** Contact: **Shelly Hennessy** email: shennessy@teklabinc.com

Project Name: I-55 Chicago Cook Co.

Project No.: IDOT 2013-080

TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ____ Other

Sampler: TT, JS

COC No.: 1 of 1

Lab Job No.: 1405252

Sample Temp: 5.1°

Special Instructions:

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

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

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

Matrix Key:

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids	Waste Characterization					Comments
1405252-019	2045-2-B09-3	5/21/14	13:05	S	X	X					X	X	X	X						
-020	2045-2-B10		13:15																	
-021	2045-2-B11		13:25																	
-022	2045-2-B12		13:35																	
-023	2045-2-B13		13:50																	
-024	2045-2-B14		14:05																	
-025	2045-2-B15	5/21/14	14:20																	
	2045-2-B16																			
	2045-2-B16 DUP																			
	2045-2-B17																			
	2045-2-B18-1																			
	2045-2-B18-2			S	X	X					X	X	X	X						

Relinquished by:	Date/Time 5/21/14 15:20	Received by:	Date/Time 5-21-14 1520
Relinquished by:	Date/Time 5-21-14 1930	Received by: Stephanie Hayes	Date/Time 5/22/14 10:52
Relinquished by:	Date/Time	Received by:	Date/Time

June 05, 2014

Colleen Grey
Andrews Engineering, Inc.
3300 Ginger Creek Drive
Springfield, IL 62711-7233
TEL: (217) 787-2334
FAX: (217) 787-9495

RE: IDOT2013-080 **WorkOrder:** 14051472

Dear Colleen Grey:

TEKLAB, INC received 3 samples on 5/28/2014 10:54:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Shelly A Hennessy

Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com

Report Contents

Client: Andrews Engineering, Inc.
Work Order: 14051472
Client Project: IDOT2013-080
Report Date: 05-Jun-14

This reporting package includes the following:

Client: Andrews Engineering, Inc. **Work Order:** 14051472

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Abbr Definition

CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.
DNI	Did not ignite
DUP	Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MB	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TNTC	Too numerous to count (> 200 CFU)

Qualifiers

# -	Unknown hydrocarbon
B -	Analyte detected in associated Method Blank
E -	Value above quantitation range
H -	Holding times exceeded
J -	Analyte detected below quantitation limits
M -	Manual Integration used to determine area response
ND -	Not Detected at the Reporting Limit
R -	RPD outside accepted recovery limits
S -	Spike Recovery outside recovery limits
X -	Value exceeds Maximum Contaminant Level

Case Narrative

http://www.teklabinc.com/

Client: Andrews Engineering, Inc.
Work Order: 14051472
Client Project: IDOT2013-080
Report Date: 05-Jun-14

Cooler Receipt Temp: 4.8 °C

Locations and Accreditations

	Collinsville	Springfield	Kansas City	Collinsville Air
Address	5445 Horseshoe Lake Road	3920 Pintail Dr	8421 Nieman Road	5445 Horseshoe Lake Road
	Collinsville, IL 62234-7425	Springfield, IL 62711-9415	Lenexa, KS 66214	Collinsville, IL 62234-7425
Phone	(618) 344-1004	(217) 698-1004	(913) 541-1998	(618) 344-1004
Fax	(618) 344-1005	(217) 698-1005	(913) 541-1998	(618) 344-1005
Email	jhriley@teklabinc.com	KKlostermann@teklabinc.com	dthompson@teklabinc.com	EHurley@teklabinc.com

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2015	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2015	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2014	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2014	Collinsville
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2014	Collinsville
Arkansas	ADEQ	88-0966		3/14/2015	Collinsville
Illinois	IDPH	17584		5/31/2015	Collinsville
Kentucky	UST	0073		1/31/2015	Collinsville
Missouri	MDNR	00930		5/31/2015	Collinsville
Oklahoma	ODEQ	9978		8/31/2014	Collinsville

Client: Andrews Engineering, Inc. **Work Order:** 14051472

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051472-001 **Client Sample ID:** 2045-2-B16

Matrix: SOLID **Collection Date:** 05/22/2014 8:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		**20.3**	%	1	05/28/2014 15:34	R191251
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		**79.7**	%	1	05/28/2014 15:34	R191251
SW-846 9045C									
pH (1:1)	NELAP	0	1		**7.76**		1	05/30/2014 16:00	R191357
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Lead	NELAP	0.006	0.007		**< 0.007**	mg/L	1	06/04/2014 12:20	99345
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	**0.0224**	mg/L	1	05/30/2014 13:14	99225
Beryllium	NELAP	0.0003	0.001		**< 0.001**	mg/L	1	05/30/2014 13:14	99225
Boron	NELAP	1	2		**< 2**	mg/L	1	05/30/2014 13:14	99225
Cadmium	NELAP	0.0003	0.002		**< 0.002**	mg/L	1	05/30/2014 13:14	99225
Chromium	NELAP	0.004	0.01		**< 0.01**	mg/L	1	05/30/2014 13:14	99225
Cobalt	NELAP	0.0022	0.01		**< 0.01**	mg/L	1	05/30/2014 13:14	99225
Iron	NELAP	0.007	0.02		**2.54**	mg/L	1	05/30/2014 13:14	99225
Lead	NELAP	0.006	0.007	X	**0.011**	mg/L	1	05/30/2014 13:14	99225
Manganese	NELAP	0.0016	0.005		**0.0175**	mg/L	1	05/30/2014 13:14	99225
Nickel	NELAP	0.0033	0.01	J	**0.0045**	mg/L	1	05/30/2014 13:14	99225
Selenium	NELAP	0.022	0.05		**< 0.05**	mg/L	1	05/30/2014 13:14	99225
Silver	NELAP	0.003	0.01		**< 0.01**	mg/L	1	05/30/2014 13:14	99225
Zinc	NELAP	0.0021	0.01		**0.0276**	mg/L	1	05/30/2014 13:14	99225
SW-846 1312, 3020A, 7010 METALS IN SPLP EXTRACT BY GFAA									
Antimony, SPLP by GFAA	NELAP	0.0017	0.005		**< 0.005**	mg/L	1	05/30/2014 13:14	99226
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		**< 0.002**	mg/L	1	06/02/2014 9:42	99226
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		**< 0.0002**	mg/L	1	05/30/2014 14:00	99228
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		**< 4.81**	mg/Kg-dry	1	05/31/2014 1:57	99209
Arsenic	NELAP	1.2	2.4		**8.62**	mg/Kg-dry	1	05/30/2014 16:55	99207
Barium	NELAP	0.24	0.48		**82.9**	mg/Kg-dry	1	05/30/2014 16:55	99207
Beryllium	NELAP	0.05	0.1		**0.67**	mg/Kg-dry	1	05/30/2014 16:55	99207
Boron	NELAP	0.96	1.92		**13**	mg/Kg-dry	1	05/30/2014 16:55	99207
Cadmium	NELAP	0.1	0.19	J	**0.12**	mg/Kg-dry	1	05/30/2014 16:55	99207
Calcium	NELAP	2.4	4.81		**16500**	mg/Kg-dry	1	05/30/2014 16:55	99207
Chromium	NELAP	0.48	0.96	X	**14.5**	mg/Kg-dry	1	05/30/2014 16:55	99207
Cobalt	NELAP	0.48	0.96		**6.21**	mg/Kg-dry	1	05/30/2014 16:55	99207
Copper	NELAP	0.48	0.96		**26.8**	mg/Kg-dry	1	05/30/2014 16:55	99207
Iron	NELAP	0.96	1.92	X	**17900**	mg/Kg-dry	1	05/30/2014 16:55	99207
Lead	NELAP	1.92	3.85		**63.6**	mg/Kg-dry	1	05/30/2014 16:55	99207
Magnesium	NELAP	0.48	0.96		**8370**	mg/Kg-dry	1	05/30/2014 16:55	99207
Manganese	NELAP	0.24	0.48		**279**	mg/Kg-dry	1	05/30/2014 16:55	99207
Nickel	NELAP	0.48	0.96		**16.3**	mg/Kg-dry	1	05/30/2014 16:55	99207
Potassium	NELAP	4.81	9.62		**1550**	mg/Kg-dry	1	05/30/2014 16:55	99207
Silver	NELAP	0.48	0.53		**< 0.53**	mg/Kg-dry	1	05/30/2014 16:55	99207
Sodium	NELAP	2.4	4.81		**3230**	mg/Kg-dry	1	05/30/2014 16:55	99207
Thallium	NELAP	2.4	2.5		**< 2.5**	mg/Kg-dry	1	05/30/2014 16:55	99207

Client: Andrews Engineering, Inc. **Work Order:** 14051472

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051472-001 **Client Sample ID:** 2045-2-B16

Matrix: SOLID **Collection Date:** 05/22/2014 8:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.48	0.96		**23.1**	mg/Kg-dry	1	05/30/2014 16:55	99207
Zinc	NELAP	0.48	0.96		**94.2**	mg/Kg-dry	1	05/30/2014 16:55	99207
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.324	0.556		**< 0.556**	mg/Kg-dry	1	06/03/2014 8:44	99285
SW-846 7471B									
Mercury	NELAP	0.003	0.012		**0.046**	mg/Kg-dry	1	05/29/2014 9:27	99178
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.823	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
1,2-Dichlorobenzene	NELAP	0.983	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
1,3-Dichlorobenzene	NELAP	1.04	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
1,4-Dichlorobenzene	NELAP	0.983	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
2,4,5-Trichlorophenol	NELAP	0.588	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
2,4,6-Trichlorophenol	NELAP	0.779	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
2,4-Dichlorophenol	NELAP	0.748	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
2,4-Dimethylphenol	NELAP	0.786	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
2,4-Dinitrophenol	NELAP	0.662	6.19		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
2,4-Dinitrotoluene	NELAP	0.643	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
2,6-Dinitrotoluene	NELAP	0.668	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
2-Chloronaphthalene	NELAP	0.742	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
2-Chlorophenol	NELAP	0.786	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
2-Methylnaphthalene	NELAP	0.736	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
2-Nitroaniline	NELAP	0.563	6.19		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
2-Nitrophenol	NELAP	0.693	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
3,3´-Dichlorobenzidine	NELAP	1.24	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
3-Nitroaniline	NELAP	0.507	6.19		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
4,6-Dinitro-2-methylphenol	NELAP	0.668	6.19		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
4-Bromophenyl phenyl ether	NELAP	0.569	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
4-Chloro-3-methylphenol	NELAP	0.68	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
4-Chloroaniline	NELAP	0.748	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
4-Chlorophenyl phenyl ether	NELAP	0.612	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
4-Nitroaniline	NELAP	0.563	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
4-Nitrophenol	NELAP	0.606	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Acenaphthene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Acenaphthylene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Anthracene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Benzo(a)anthracene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Benzo(a)pyrene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Benzo(b)fluoranthene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Benzo(g,h,i)perylene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Benzo(k)fluoranthene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Bis(2-chloroethoxy)methane	NELAP	0.724	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Bis(2-chloroethyl)ether	NELAP	0.878	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Bis(2-chloroisopropyl)ether	NELAP	0.705	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Bis(2-ethylhexyl)phthalate	NELAP	0.724	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Butyl benzyl phthalate	NELAP	0.625	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Carbazole		0.755	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Chrysene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321

Client: Andrews Engineering, Inc. **Work Order:** 14051472

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051472-001 **Client Sample ID:** 2045-2-B16

Matrix: SOLID **Collection Date:** 05/22/2014 8:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Dibenzo(a,h)anthracene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Dibenzofuran	NELAP	0.779	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Diethyl phthalate	NELAP	0.594	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Dimethyl phthalate	NELAP	0.563	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Di-n-butyl phthalate	NELAP	0.637	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Di-n-octyl phthalate	NELAP	0.643	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Fluoranthene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Fluorene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Hexachlorobenzene	NELAP	0.606	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Hexachlorobutadiene	NELAP	0.959	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Hexachlorocyclopentadiene	NELAP	0.631	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Hexachloroethane	NELAP	1.03	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Indeno(1,2,3-cd)pyrene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Isophorone	NELAP	0.73	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
m,p-Cresol	NELAP	0.779	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Naphthalene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Nitrobenzene	NELAP	0.773	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
N-Nitroso-di-n-propylamine	NELAP	0.68	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
N-Nitrosodiphenylamine	NELAP	0.569	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
o-Cresol	NELAP	0.73	3.09		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Pentachlorophenol	NELAP	4.08	12.4		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Phenanthrene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Phenol	NELAP	0.718	2.16		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Pyrene	NELAP	0.103	0.21		**ND**	mg/Kg-dry	5	06/03/2014 20:55	99321
Surr: 2,4,6-Tribromophenol		0	33.7-105		**85.1**	%REC	5	06/03/2014 20:55	99321
Surr: 2-Fluorobiphenyl		0	24.2-75.3		**72.3**	%REC	5	06/03/2014 20:55	99321
Surr: 2-Fluorophenol		0	43-85.2		**70.5**	%REC	5	06/03/2014 20:55	99321
Surr: Nitrobenzene-d5		0	35.5-60.5	S	**62.6**	%REC	5	06/03/2014 20:55	99321
Surr: Phenol-d5		0	48.9-86.9		**77**	%REC	5	06/03/2014 20:55	99321
Surr: p-Terphenyl-d14		0	40.2-101		**84.7**	%REC	5	06/03/2014 20:55	99321

Surrogate recovery is outside QC limits due to matrix interference.

Elevated reporting limit due to sample extract composition.

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
1,1,2,2-Tetrachloroethane	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
1,1,2-Trichloroethane	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
1,1-Dichloroethane	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
1,1-Dichloroethene	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
1,2-Dichloroethane	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
1,2-Dichloropropane	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
1,3-Dichloropropene, Total		0.0012	0.005		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
2-Butanone	NELAP	0.0124	0.062	J	**0.017**	mg/Kg-dry	1	05/29/2014 19:34	99259
2-Hexanone	NELAP	0.0124	0.062		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
4-Methyl-2-pentanone	NELAP	0.0124	0.062		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Acetone	NELAP	0.0124	0.062		**0.063**	mg/Kg-dry	1	05/29/2014 19:34	99259
Benzene	NELAP	0.0006	0.001		**0.004**	mg/Kg-dry	1	05/29/2014 19:34	99259
Bromodichloromethane	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259

Client: Andrews Engineering, Inc. **Work Order:** 14051472

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051472-001 **Client Sample ID:** 2045-2-B16

Matrix: SOLID **Collection Date:** 05/22/2014 8:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromoform	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Bromomethane	NELAP	0.0025	0.012		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Carbon disulfide	NELAP	0.0037	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Carbon tetrachloride	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Chlorobenzene	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Chloroethane	NELAP	0.0025	0.012		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Chloroform	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Chloromethane	NELAP	0.0025	0.012		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
cis-1,2-Dichloroethene	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
cis-1,3-Dichloropropene	NELAP	0.0012	0.005		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Dibromochloromethane	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Ethylbenzene	NELAP	0.0012	0.006	J	**0.002**	mg/Kg-dry	1	05/29/2014 19:34	99259
m,p-Xylenes	NELAP	0.0012	0.006	J	**0.003**	mg/Kg-dry	1	05/29/2014 19:34	99259
Methyl tert-butyl ether	NELAP	0.0006	0.002		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Methylene chloride	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
o-Xylene	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Styrene	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Tetrachloroethene	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Toluene	NELAP	0.0012	0.006		**0.007**	mg/Kg-dry	1	05/29/2014 19:34	99259
trans-1,2-Dichloroethene	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
trans-1,3-Dichloropropene	NELAP	0.0012	0.005		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Trichloroethene	NELAP	0.0012	0.006		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Vinyl acetate	NELAP	0.0248	0.062		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Vinyl chloride	NELAP	0.0006	0.002		**ND**	mg/Kg-dry	1	05/29/2014 19:34	99259
Xylenes, Total	NELAP	0.0012	0.006	J	**0.003**	mg/Kg-dry	1	05/29/2014 19:34	99259
Surr: 1,2-Dichloroethane-d4		0	72.2-131		**108.8**	%REC	1	05/29/2014 19:34	99259
Surr: 4-Bromofluorobenzene		0	82.1-116		**96.4**	%REC	1	05/29/2014 19:34	99259
Surr: Dibromofluoromethane		0	77.7-120		**105.7**	%REC	1	05/29/2014 19:34	99259
Surr: Toluene-d8		0	86-116		**89.5**	%REC	1	05/29/2014 19:34	99259

Client: Andrews Engineering, Inc. **Work Order:** 14051472

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051472-002 **Client Sample ID:** 2045-2-B17

Matrix: SOLID **Collection Date:** 05/22/2014 8:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		**7**	%	1	05/28/2014 15:34	R191251
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		**93**	%	1	05/28/2014 15:34	R191251
SW-846 9045C									
pH (1:1)	NELAP	0	1		**8.93**		1	05/30/2014 16:06	R191357
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Lead	NELAP	0.006	0.007		**0.116**	mg/L	1	06/04/2014 12:39	99345
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	**0.0489**	mg/L	1	05/30/2014 13:25	99225
Beryllium	NELAP	0.0003	0.001		**< 0.001**	mg/L	1	05/30/2014 13:25	99225
Boron	NELAP	1	2		**< 2**	mg/L	1	05/30/2014 13:25	99225
Cadmium	NELAP	0.0003	0.002		**< 0.002**	mg/L	1	05/30/2014 13:25	99225
Chromium	NELAP	0.004	0.01		**< 0.01**	mg/L	1	05/30/2014 13:25	99225
Cobalt	NELAP	0.0022	0.01		**< 0.01**	mg/L	1	05/30/2014 13:25	99225
Iron	NELAP	0.007	0.02	J	**0.0187**	mg/L	1	05/30/2014 13:25	99225
Lead	NELAP	0.006	0.007		**< 0.007**	mg/L	1	05/30/2014 13:25	99225
Manganese	NELAP	0.0016	0.005		**< 0.005**	mg/L	1	05/30/2014 13:25	99225
Nickel	NELAP	0.0033	0.01		**< 0.01**	mg/L	1	05/30/2014 13:25	99225
Selenium	NELAP	0.022	0.05		**< 0.05**	mg/L	1	05/30/2014 13:25	99225
Silver	NELAP	0.003	0.01		**< 0.01**	mg/L	1	05/30/2014 13:25	99225
Zinc	NELAP	0.0021	0.01		**< 0.01**	mg/L	1	05/30/2014 13:25	99225
SW-846 1312, 3020A, 7010 METALS IN SPLP EXTRACT BY GFAA									
Antimony, SPLP by GFAA	NELAP	0.0017	0.005		**< 0.005**	mg/L	1	05/30/2014 13:26	99226
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		**< 0.002**	mg/L	1	05/30/2014 12:37	99226
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		**< 0.0002**	mg/L	1	05/30/2014 14:06	99228
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		**< 5**	mg/Kg-dry	1	05/31/2014 2:03	99209
Arsenic	NELAP	1.23	2.45		**6.72**	mg/Kg-dry	1	05/30/2014 16:59	99207
Barium	NELAP	0.25	0.49		**83.7**	mg/Kg-dry	1	05/30/2014 16:59	99207
Beryllium	NELAP	0.05	0.1		**0.45**	mg/Kg-dry	1	05/30/2014 16:59	99207
Boron	NELAP	0.98	1.96		**22.8**	mg/Kg-dry	1	05/30/2014 16:59	99207
Cadmium	NELAP	0.1	0.2		**0.32**	mg/Kg-dry	1	05/30/2014 16:59	99207
Calcium	NELAP	2.45	4.9		**132000**	mg/Kg-dry	1	05/30/2014 16:59	99207
Chromium	NELAP	0.49	0.98		**9.79**	mg/Kg-dry	1	05/30/2014 16:59	99207
Cobalt	NELAP	0.49	0.98		**3.05**	mg/Kg-dry	1	05/30/2014 16:59	99207
Copper	NELAP	0.49	0.98		**49.6**	mg/Kg-dry	1	05/30/2014 16:59	99207
Iron	NELAP	0.98	1.96		**10500**	mg/Kg-dry	1	05/30/2014 16:59	99207
Lead	NELAP	1.96	3.92	X	**226**	mg/Kg-dry	1	05/30/2014 16:59	99207
Magnesium	NELAP	0.49	0.98		**71700**	mg/Kg-dry	1	05/30/2014 16:59	99207
Manganese	NELAP	0.25	0.49		**158**	mg/Kg-dry	1	05/30/2014 16:59	99207
Nickel	NELAP	0.49	0.98		**9.12**	mg/Kg-dry	1	05/30/2014 16:59	99207
Potassium	NELAP	4.9	9.8		**727**	mg/Kg-dry	1	05/30/2014 16:59	99207
Silver	NELAP	0.49	0.54		**< 0.54**	mg/Kg-dry	1	05/30/2014 16:59	99207
Sodium	NELAP	2.45	4.9		**687**	mg/Kg-dry	1	05/30/2014 16:59	99207
Thallium	NELAP	2.45	2.55		**< 2.55**	mg/Kg-dry	1	05/30/2014 16:59	99207

Client: Andrews Engineering, Inc. **Work Order:** 14051472

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051472-002 **Client Sample ID:** 2045-2-B17

Matrix: SOLID **Collection Date:** 05/22/2014 8:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.49	0.98		**11.4**	mg/Kg-dry	1	05/30/2014 16:59	99207
Zinc	NELAP	0.49	0.98		**160**	mg/Kg-dry	1	05/30/2014 16:59	99207
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.318	0.545		**< 0.545**	mg/Kg-dry	1	06/03/2014 8:47	99285
SW-846 7471B									
Mercury	NELAP	0.003	0.01		**0.152**	mg/Kg-dry	1	05/29/2014 9:29	99178
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.142	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
1,2-Dichlorobenzene	NELAP	0.17	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
1,3-Dichlorobenzene	NELAP	0.18	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
1,4-Dichlorobenzene	NELAP	0.17	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
2,4,5-Trichlorophenol	NELAP	0.102	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
2,4,6-Trichlorophenol	NELAP	0.135	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
2,4-Dichlorophenol	NELAP	0.13	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
2,4-Dimethylphenol	NELAP	0.136	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
2,4-Dinitrophenol	NELAP	0.115	1.07		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
2,4-Dinitrotoluene	NELAP	0.111	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
2,6-Dinitrotoluene	NELAP	0.116	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
2-Chloronaphthalene	NELAP	0.128	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
2-Chlorophenol	NELAP	0.136	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
2-Methylnaphthalene	NELAP	0.127	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
2-Nitroaniline	NELAP	0.097	1.07		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
2-Nitrophenol	NELAP	0.12	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
3,3´-Dichlorobenzidine	NELAP	0.214	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
3-Nitroaniline	NELAP	0.088	1.07		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
4,6-Dinitro-2-methylphenol	NELAP	0.116	1.07		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
4-Bromophenyl phenyl ether	NELAP	0.098	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
4-Chloro-3-methylphenol	NELAP	0.118	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
4-Chloroaniline	NELAP	0.13	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
4-Chlorophenyl phenyl ether	NELAP	0.106	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
4-Nitroaniline	NELAP	0.097	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
4-Nitrophenol	NELAP	0.105	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Acenaphthene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Acenaphthylene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Anthracene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Benzo(a)anthracene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Benzo(a)pyrene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Benzo(b)fluoranthene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Benzo(g,h,i)perylene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Benzo(k)fluoranthene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Bis(2-chloroethoxy)methane	NELAP	0.125	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Bis(2-chloroethyl)ether	NELAP	0.152	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Bis(2-chloroisopropyl)ether	NELAP	0.122	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Bis(2-ethylhexyl)phthalate	NELAP	0.125	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Butyl benzyl phthalate	NELAP	0.108	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Carbazole		0.131	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Chrysene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321

Client: Andrews Engineering, Inc. **Work Order:** 14051472

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051472-002 **Client Sample ID:** 2045-2-B17

Matrix: SOLID **Collection Date:** 05/22/2014 8:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Dibenzo(a,h)anthracene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Dibenzofuran	NELAP	0.135	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Diethyl phthalate	NELAP	0.103	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Dimethyl phthalate	NELAP	0.097	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Di-n-butyl phthalate	NELAP	0.11	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Di-n-octyl phthalate	NELAP	0.111	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Fluoranthene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Fluorene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Hexachlorobenzene	NELAP	0.105	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Hexachlorobutadiene	NELAP	0.166	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Hexachlorocyclopentadiene	NELAP	0.109	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Hexachloroethane	NELAP	0.179	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Isophorone	NELAP	0.126	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
m,p-Cresol	NELAP	0.135	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Naphthalene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Nitrobenzene	NELAP	0.134	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
N-Nitroso-di-n-propylamine	NELAP	0.118	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
N-Nitrosodiphenylamine	NELAP	0.098	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
o-Cresol	NELAP	0.126	0.535		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Pentachlorophenol	NELAP	0.707	2.14		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Phenanthrene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Phenol	NELAP	0.124	0.375		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Pyrene	NELAP	0.018	0.036		**ND**	mg/Kg-dry	1	06/03/2014 19:11	99321
Surr: 2,4,6-Tribromophenol		0	33.7-105		**72.7**	%REC	1	06/03/2014 19:11	99321
Surr: 2-Fluorobiphenyl		0	24.2-75.3		**57.5**	%REC	1	06/03/2014 19:11	99321
Surr: 2-Fluorophenol		0	43-85.2		**58.5**	%REC	1	06/03/2014 19:11	99321
Surr: Nitrobenzene-d5		0	35.5-60.5		**50.2**	%REC	1	06/03/2014 19:11	99321
Surr: Phenol-d5		0	48.9-86.9		**63.3**	%REC	1	06/03/2014 19:11	99321
Surr: p-Terphenyl-d14		0	40.2-101		**70.2**	%REC	1	06/03/2014 19:11	99321
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
1,1,2,2-Tetrachloroethane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
1,1,2-Trichloroethane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
1,1-Dichloroethane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
1,1-Dichloroethene	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
1,2-Dichloroethane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
1,2-Dichloropropane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
1,3-Dichloropropene, Total		0.001	0.004		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
2-Butanone	NELAP	0.0101	0.051		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
2-Hexanone	NELAP	0.0101	0.051		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
4-Methyl-2-pentanone	NELAP	0.0101	0.051		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Acetone	NELAP	0.0101	0.051	J	**0.022**	mg/Kg-dry	1	05/28/2014 22:20	99204
Benzene	NELAP	0.0005	0.001		**0.002**	mg/Kg-dry	1	05/28/2014 22:20	99204
Bromodichloromethane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Bromoform	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Bromomethane	NELAP	0.002	0.01		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204

Client: Andrews Engineering, Inc. **Work Order:** 14051472

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051472-002 **Client Sample ID:** 2045-2-B17

Matrix: SOLID **Collection Date:** 05/22/2014 8:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbon disulfide	NELAP	0.003	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Carbon tetrachloride	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Chlorobenzene	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Chloroethane	NELAP	0.002	0.01		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Chloroform	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Chloromethane	NELAP	0.002	0.01		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
cis-1,2-Dichloroethene	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
cis-1,3-Dichloropropene	NELAP	0.001	0.004		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Dibromochloromethane	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Ethylbenzene	NELAP	0.001	0.005	J	**0.001**	mg/Kg-dry	1	05/28/2014 22:20	99204
m,p-Xylenes	NELAP	0.001	0.005	J	**0.001**	mg/Kg-dry	1	05/28/2014 22:20	99204
Methyl tert-butyl ether	NELAP	0.0005	0.002		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Methylene chloride	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
o-Xylene	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Styrene	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Tetrachloroethene	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Toluene	NELAP	0.001	0.005	J	**0.003**	mg/Kg-dry	1	05/28/2014 22:20	99204
trans-1,2-Dichloroethene	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
trans-1,3-Dichloropropene	NELAP	0.001	0.004		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Trichloroethene	NELAP	0.001	0.005		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Vinyl acetate	NELAP	0.0202	0.051		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Vinyl chloride	NELAP	0.0005	0.002		**ND**	mg/Kg-dry	1	05/28/2014 22:20	99204
Xylenes, Total	NELAP	0.001	0.005	J	**0.001**	mg/Kg-dry	1	05/28/2014 22:20	99204
Surr: 1,2-Dichloroethane-d4		0	72.2-131		**114**	%REC	1	05/28/2014 22:20	99204
Surr: 4-Bromofluorobenzene		0	82.1-116		**102**	%REC	1	05/28/2014 22:20	99204
Surr: Dibromofluoromethane		0	77.7-120		**107.1**	%REC	1	05/28/2014 22:20	99204
Surr: Toluene-d8		0	86-116		**94.6**	%REC	1	05/28/2014 22:20	99204

Client: Andrews Engineering, Inc. **Work Order:** 14051472

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051472-003 **Client Sample ID:** 2045-2-B16 DUP

Matrix: SOLID **Collection Date:** 05/22/2014 8:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		**11**	%	1	05/28/2014 15:35	R191251
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		**89**	%	1	05/28/2014 15:35	R191251
SW-846 9045C									
pH (1:1)	NELAP	0	1		**8.16**		1	05/30/2014 16:07	R191357
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Lead	NELAP	0.006	0.007		**0.115**	mg/L	1	06/04/2014 12:42	99345
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	**0.0311**	mg/L	1	05/30/2014 13:36	99225
Beryllium	NELAP	0.0003	0.001		**< 0.001**	mg/L	1	05/30/2014 13:36	99225
Boron	NELAP	1	2		**< 2**	mg/L	1	05/30/2014 13:36	99225
Cadmium	NELAP	0.0003	0.002		**< 0.002**	mg/L	1	05/30/2014 13:36	99225
Chromium	NELAP	0.004	0.01	J	**0.0049**	mg/L	1	05/30/2014 13:36	99225
Cobalt	NELAP	0.0022	0.01		**< 0.01**	mg/L	1	05/30/2014 13:36	99225
Iron	NELAP	0.007	0.02		**3.27**	mg/L	1	05/30/2014 13:36	99225
Lead	NELAP	0.006	0.007	X	**0.0208**	mg/L	1	05/30/2014 13:36	99225
Manganese	NELAP	0.0016	0.005		**0.0276**	mg/L	1	05/30/2014 13:36	99225
Nickel	NELAP	0.0033	0.01	J	**0.0037**	mg/L	1	05/30/2014 13:36	99225
Selenium	NELAP	0.022	0.05		**< 0.05**	mg/L	1	05/30/2014 13:36	99225
Silver	NELAP	0.003	0.01		**< 0.01**	mg/L	1	05/30/2014 13:36	99225
Zinc	NELAP	0.0021	0.01		**0.08**	mg/L	1	05/30/2014 13:36	99225
SW-846 1312, 3020A, 7010 METALS IN SPLP EXTRACT BY GFAA									
Antimony, SPLP by GFAA	NELAP	0.0017	0.005		**< 0.005**	mg/L	1	05/30/2014 13:29	99226
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		**< 0.002**	mg/L	1	05/30/2014 12:41	99226
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		**< 0.0002**	mg/L	1	05/30/2014 14:11	99228
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		**< 4.81**	mg/Kg-dry	1	05/31/2014 2:09	99209
Arsenic	NELAP	1.16	2.31		**5.17**	mg/Kg-dry	1	05/30/2014 17:03	99207
Barium	NELAP	0.23	0.46		**64.6**	mg/Kg-dry	1	05/30/2014 17:03	99207
Beryllium	NELAP	0.05	0.09		**0.59**	mg/Kg-dry	1	05/30/2014 17:03	99207
Boron	NELAP	0.93	1.85		**14**	mg/Kg-dry	1	05/30/2014 17:03	99207
Cadmium	NELAP	0.09	0.19		**< 0.19**	mg/Kg-dry	1	05/30/2014 17:03	99207
Calcium	NELAP	2.31	4.63		**29000**	mg/Kg-dry	1	05/30/2014 17:03	99207
Chromium	NELAP	0.46	0.93		**10.1**	mg/Kg-dry	1	05/30/2014 17:03	99207
Cobalt	NELAP	0.46	0.93		**4.22**	mg/Kg-dry	1	05/30/2014 17:03	99207
Copper	NELAP	0.46	0.93		**24.1**	mg/Kg-dry	1	05/30/2014 17:03	99207
Iron	NELAP	0.93	1.85		**13300**	mg/Kg-dry	1	05/30/2014 17:03	99207
Lead	NELAP	1.85	3.7		**70.5**	mg/Kg-dry	1	05/30/2014 17:03	99207
Magnesium	NELAP	0.46	0.93		**14600**	mg/Kg-dry	1	05/30/2014 17:03	99207
Manganese	NELAP	0.23	0.46		**232**	mg/Kg-dry	1	05/30/2014 17:03	99207
Nickel	NELAP	0.46	0.93		**10.6**	mg/Kg-dry	1	05/30/2014 17:03	99207
Potassium	NELAP	4.63	9.26		**792**	mg/Kg-dry	1	05/30/2014 17:03	99207
Silver	NELAP	0.46	0.51		**< 0.51**	mg/Kg-dry	1	05/30/2014 17:03	99207
Sodium	NELAP	2.31	4.63		**1880**	mg/Kg-dry	1	05/30/2014 17:03	99207
Thallium	NELAP	2.31	2.41		**< 2.41**	mg/Kg-dry	1	05/30/2014 17:03	99207

Client: Andrews Engineering, Inc. **Work Order:** 14051472

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051472-003 **Client Sample ID:** 2045-2-B16 DUP

Matrix: SOLID **Collection Date:** 05/22/2014 8:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.46	0.93		**14.2**	mg/Kg-dry	1	05/30/2014 17:03	99207
Zinc	NELAP	0.46	0.93		**130**	mg/Kg-dry	1	05/30/2014 17:03	99207
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.33	0.566		**< 0.566**	mg/Kg-dry	1	06/03/2014 8:51	99285
SW-846 7471B									
Mercury	NELAP	0.003	0.011		**0.067**	mg/Kg-dry	1	05/29/2014 9:32	99178
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	1.48	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
1,2-Dichlorobenzene	NELAP	1.77	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
1,3-Dichlorobenzene	NELAP	1.87	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
1,4-Dichlorobenzene	NELAP	1.77	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
2,4,5-Trichlorophenol	NELAP	1.05	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
2,4,6-Trichlorophenol	NELAP	1.4	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
2,4-Dichlorophenol	NELAP	1.34	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
2,4-Dimethylphenol	NELAP	1.41	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
2,4-Dinitrophenol	NELAP	1.19	11.1		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
2,4-Dinitrotoluene	NELAP	1.15	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
2,6-Dinitrotoluene	NELAP	1.2	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
2-Chloronaphthalene	NELAP	1.33	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
2-Chlorophenol	NELAP	1.41	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
2-Methylnaphthalene	NELAP	1.32	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
2-Nitroaniline	NELAP	1.01	11.1		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
2-Nitrophenol	NELAP	1.24	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
3,3´-Dichlorobenzidine	NELAP	2.22	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
3-Nitroaniline	NELAP	0.911	11.1		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
4,6-Dinitro-2-methylphenol	NELAP	1.2	11.1		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
4-Bromophenyl phenyl ether	NELAP	1.02	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
4-Chloro-3-methylphenol	NELAP	1.22	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
4-Chloroaniline	NELAP	1.34	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
4-Chlorophenyl phenyl ether	NELAP	1.1	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
4-Nitroaniline	NELAP	1.01	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
4-Nitrophenol	NELAP	1.09	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Acenaphthene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Acenaphthylene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Anthracene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Benzo(a)anthracene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Benzo(a)pyrene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Benzo(b)fluoranthene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Benzo(g,h,i)perylene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Benzo(k)fluoranthene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Bis(2-chloroethoxy)methane	NELAP	1.3	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Bis(2-chloroethyl)ether	NELAP	1.58	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Bis(2-chloroisopropyl)ether	NELAP	1.27	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Bis(2-ethylhexyl)phthalate	NELAP	1.3	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Butyl benzyl phthalate	NELAP	1.12	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Carbazole		1.35	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Chrysene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321

Client: Andrews Engineering, Inc. **Work Order:** 14051472

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051472-003 **Client Sample ID:** 2045-2-B16 DUP

Matrix: SOLID **Collection Date:** 05/22/2014 8:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Dibenzo(a,h)anthracene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Dibenzofuran	NELAP	1.4	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Diethyl phthalate	NELAP	1.07	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Dimethyl phthalate	NELAP	1.01	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Di-n-butyl phthalate	NELAP	1.14	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Di-n-octyl phthalate	NELAP	1.15	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Fluoranthene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Fluorene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Hexachlorobenzene	NELAP	1.09	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Hexachlorobutadiene	NELAP	1.72	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Hexachlorocyclopentadiene	NELAP	1.13	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Hexachloroethane	NELAP	1.85	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Indeno(1,2,3-cd)pyrene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Isophorone	NELAP	1.31	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
m,p-Cresol	NELAP	1.4	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Naphthalene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Nitrobenzene	NELAP	1.39	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
N-Nitroso-di-n-propylamine	NELAP	1.22	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
N-Nitrosodiphenylamine	NELAP	1.02	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
o-Cresol	NELAP	1.31	5.55		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Pentachlorophenol	NELAP	7.33	22.2		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Phenanthrene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Phenol	NELAP	1.29	3.89		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Pyrene	NELAP	0.185	0.378		**ND**	mg/Kg-dry	10	06/03/2014 21:29	99321
Surr: 2,4,6-Tribromophenol		0	33.7-105		**73.5**	%REC	10	06/03/2014 21:29	99321
Surr: 2-Fluorobiphenyl		0	24.2-75.3		**68.9**	%REC	10	06/03/2014 21:29	99321
Surr: 2-Fluorophenol		0	43-85.2		**67.3**	%REC	10	06/03/2014 21:29	99321
Surr: Nitrobenzene-d5		0	35.5-60.5		**60.3**	%REC	10	06/03/2014 21:29	99321
Surr: Phenol-d5		0	48.9-86.9		**75.2**	%REC	10	06/03/2014 21:29	99321
Surr: p-Terphenyl-d14		0	40.2-101		**81.5**	%REC	10	06/03/2014 21:29	99321
Elevated reporting limit due to sample extract composition.									
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
1,1,2,2-Tetrachloroethane	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
1,1,2-Trichloroethane	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
1,1-Dichloroethane	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
1,1-Dichloroethene	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
1,2-Dichloroethane	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
1,2-Dichloropropane	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
1,3-Dichloropropene, Total		0.0011	0.004		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
2-Butanone	NELAP	0.011	0.055	J	**0.018**	mg/Kg-dry	1	05/30/2014 12:51	99300
2-Hexanone	NELAP	0.011	0.055		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
4-Methyl-2-pentanone	NELAP	0.011	0.055		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Acetone	NELAP	0.011	0.055		**0.098**	mg/Kg-dry	1	05/30/2014 12:51	99300
Benzene	NELAP	0.0006	0.001		**0.001**	mg/Kg-dry	1	05/30/2014 12:51	99300
Bromodichloromethane	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Bromoform	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300

Client: Andrews Engineering, Inc. **Work Order:** 14051472

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051472-003 **Client Sample ID:** 2045-2-B16 DUP

Matrix: SOLID **Collection Date:** 05/22/2014 8:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0022	0.011		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Carbon disulfide	NELAP	0.0033	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Carbon tetrachloride	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Chlorobenzene	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Chloroethane	NELAP	0.0022	0.011		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Chloroform	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Chloromethane	NELAP	0.0022	0.011		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
cis-1,2-Dichloroethene	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
cis-1,3-Dichloropropene	NELAP	0.0011	0.004		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Dibromochloromethane	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Ethylbenzene	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
m,p-Xylenes	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Methyl tert-butyl ether	NELAP	0.0006	0.002		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Methylene chloride	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
o-Xylene	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Styrene	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Tetrachloroethene	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Toluene	NELAP	0.0011	0.006	J	**0.002**	mg/Kg-dry	1	05/30/2014 12:51	99300
trans-1,2-Dichloroethene	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
trans-1,3-Dichloropropene	NELAP	0.0011	0.004		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Trichloroethene	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Vinyl acetate	NELAP	0.022	0.055		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Vinyl chloride	NELAP	0.0006	0.002		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Xylenes, Total	NELAP	0.0011	0.006		**ND**	mg/Kg-dry	1	05/30/2014 12:51	99300
Surr: 1,2-Dichloroethane-d4		0	72.2-131		**93.6**	%REC	1	05/30/2014 12:51	99300
Surr: 4-Bromofluorobenzene		0	82.1-116		**114.6**	%REC	1	05/30/2014 12:51	99300
Surr: Dibromofluoromethane		0	77.7-120		**97.3**	%REC	1	05/30/2014 12:51	99300
Surr: Toluene-d8		0	86-116		**106.6**	%REC	1	05/30/2014 12:51	99300

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: **TekLab, Inc.** Address: **5445 Horseshoe Lake Road** **Collinsville, IL 62234** Phone: **877-344-1003** Contact: **Shelly Hennessy** email: shennessy@teklabinc.com

Project Name: I55 CHICAGO COOK CO

Project No.: IDOT 2013-080

TAT: [X] 15 BD [ ] 10 BD [ ] 5 BD [ ] 2 BD ____ Other

Sampler: TT, JS

COC No.: 1 of 1

Lab Job No.: 140514172

Sample Temp: 48°c, ice

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.

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
140514172-001	2045-Z-B16	5/22/14	08:40	S	X	X					X	X	X	X						0-8
-002	2045-Z-B17	5/22/14	08:50	S	X	X					X	X	X	X						0-8
-003	2045-Z-B16-DUP	5/22/14	08:45	S	X	X					X	X	X	X						0-8

Matrix Key:

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

Relinquished by:	Date/Time	Received by:	Date/Time
	5-27-14 1520		5-27-14 15:20
	5-27-14 17:00		5/28/14 1054
		Fed Ex	

June 10, 2014

Colleen Grey
Andrews Engineering, Inc.
3300 Ginger Creek Drive
Springfield, IL 62711-7233
TEL: (217) 787-2334
FAX: (217) 787-9495

RE: IDOT2013-080 **WorkOrder:** 14051543

Dear Colleen Grey:

TEKLAB, INC received 21 samples on 5/29/2014 8:57:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Shelly A Hennessy

Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com

Report Contents

Client: Andrews Engineering, Inc.
Work Order: 14051543
Client Project: IDOT2013-080
Report Date: 10-Jun-14

This reporting package includes the following:

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Abbr Definition

CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.
DNI	Did not ignite
DUP	Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MB	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TNTC	Too numerous to count (> 200 CFU)

Qualifiers

# -	Unknown hydrocarbon	B -	Analyte detected in associated Method Blank
E -	Value above quantitation range	H -	Holding times exceeded
J -	Analyte detected below quantitation limits	M -	Manual Integration used to determine area response
ND -	Not Detected at the Reporting Limit	R -	RPD outside accepted recovery limits
S -	Spike Recovery outside recovery limits	X -	Value exceeds Maximum Contaminant Level

Case Narrative

http://www.teklabinc.com/

Client: Andrews Engineering, Inc.
Work Order: 14051543
Client Project: IDOT2013-080
Report Date: 10-Jun-14

Cooler Receipt Temp: 5.0 °C

Locations and Accreditations

	Collinsville	Springfield	Kansas City	Collinsville Air
Address	5445 Horseshoe Lake Road	3920 Pintail Dr	8421 Nieman Road	5445 Horseshoe Lake Road
	Collinsville, IL 62234-7425	Springfield, IL 62711-9415	Lenexa, KS 66214	Collinsville, IL 62234-7425
Phone	(618) 344-1004	(217) 698-1004	(913) 541-1998	(618) 344-1004
Fax	(618) 344-1005	(217) 698-1005	(913) 541-1998	(618) 344-1005
Email	jhriley@teklabinc.com	KKlostermann@teklabinc.com	dthompson@teklabinc.com	EHurley@teklabinc.com

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2015	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2015	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2014	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2014	Collinsville
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2014	Collinsville
Arkansas	ADEQ	88-0966		3/14/2015	Collinsville
Illinois	IDPH	17584		5/31/2015	Collinsville
Kentucky	UST	0073		1/31/2015	Collinsville
Missouri	MDNR	00930		5/31/2015	Collinsville
Oklahoma	ODEQ	9978		8/31/2014	Collinsville

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-006 **Client Sample ID:** 2045-2-B21

Matrix: SOLID **Collection Date:** 05/28/2014 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		**9.8**	%	1	05/30/2014 14:18	R191369
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		**90.2**	%	1	05/30/2014 14:18	R191369
SW-846 9045C									
pH (1:1)	NELAP	0	1		**8.6**		1	05/30/2014 20:49	R191357
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	**0.02**	mg/L	1	06/02/2014 12:26	99260
Beryllium	NELAP	0.0003	0.001		**< 0.001**	mg/L	1	06/02/2014 12:26	99260
Boron	NELAP	1	2		**< 2**	mg/L	1	06/02/2014 12:26	99260
Cadmium	NELAP	0.0003	0.002		**< 0.002**	mg/L	1	06/02/2014 12:26	99260
Chromium	NELAP	0.004	0.01		**< 0.01**	mg/L	1	06/02/2014 12:26	99260
Cobalt	NELAP	0.0022	0.01		**< 0.01**	mg/L	1	06/02/2014 12:26	99260
Iron	NELAP	0.007	0.02		**< 0.02**	mg/L	1	06/02/2014 12:26	99260
Lead	NELAP	0.006	0.007		**< 0.007**	mg/L	1	06/02/2014 12:26	99260
Manganese	NELAP	0.0016	0.005		**< 0.005**	mg/L	1	06/02/2014 12:26	99260
Nickel	NELAP	0.0033	0.01		**< 0.01**	mg/L	1	06/02/2014 12:26	99260
Selenium	NELAP	0.022	0.05		**< 0.05**	mg/L	1	06/02/2014 12:26	99260
Silver	NELAP	0.003	0.01		**< 0.01**	mg/L	1	06/02/2014 12:26	99260
Zinc	NELAP	0.0021	0.01		**< 0.01**	mg/L	1	06/02/2014 12:26	99260
SW-846 1312, 3020A, 7010 METALS IN SPLP EXTRACT BY GFAA									
Antimony, SPLP by GFAA	NELAP	0.0017	0.005		**< 0.005**	mg/L	1	05/30/2014 16:55	99263
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		**< 0.002**	mg/L	1	06/02/2014 12:16	99263
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		**< 0.0002**	mg/L	1	06/02/2014 12:12	99280
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.45	4.72		**< 4.72**	mg/Kg-dry	1	06/03/2014 6:46	99292
Arsenic	NELAP	1.18	2.36		**5.05**	mg/Kg-dry	1	06/02/2014 19:29	99275
Barium	NELAP	0.24	0.47		**33.8**	mg/Kg-dry	1	06/02/2014 19:29	99275
Beryllium	NELAP	0.05	0.09		**0.31**	mg/Kg-dry	1	06/02/2014 19:29	99275
Boron	NELAP	0.94	1.89		**18**	mg/Kg-dry	1	06/02/2014 19:29	99275
Cadmium	NELAP	0.09	0.19		**< 0.19**	mg/Kg-dry	1	06/02/2014 19:29	99275
Calcium	NELAP	2.36	4.72		**151000**	mg/Kg-dry	1	06/02/2014 19:29	99275
Chromium	NELAP	0.47	0.94		**5.64**	mg/Kg-dry	1	06/02/2014 19:29	99275
Cobalt	NELAP	0.47	0.94		**2.63**	mg/Kg-dry	1	06/02/2014 19:29	99275
Copper	NELAP	0.47	0.94		**107**	mg/Kg-dry	1	06/02/2014 19:29	99275
Iron	NELAP	0.94	1.89		**12700**	mg/Kg-dry	1	06/02/2014 19:29	99275
Lead	NELAP	1.89	3.77		**35.9**	mg/Kg-dry	1	06/02/2014 19:29	99275
Magnesium	NELAP	0.47	0.94		**88100**	mg/Kg-dry	1	06/02/2014 19:29	99275
Manganese	NELAP	0.24	0.47		**142**	mg/Kg-dry	1	06/02/2014 19:29	99275
Nickel	NELAP	0.47	0.94		**9.36**	mg/Kg-dry	1	06/02/2014 19:29	99275
Potassium	NELAP	4.72	9.43		**573**	mg/Kg-dry	1	06/02/2014 19:29	99275
Silver	NELAP	0.47	0.52		**< 0.52**	mg/Kg-dry	1	06/02/2014 19:29	99275
Sodium	NELAP	2.36	4.72		**1450**	mg/Kg-dry	1	06/02/2014 19:29	99275
Thallium	NELAP	2.36	2.45		**< 2.45**	mg/Kg-dry	1	06/02/2014 19:29	99275
Vanadium	NELAP	0.47	0.94		**8.58**	mg/Kg-dry	1	06/02/2014 19:29	99275
Zinc	NELAP	0.47	0.94		**93.5**	mg/Kg-dry	1	06/02/2014 19:29	99275

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-006 **Client Sample ID:** 2045-2-B21

Matrix: SOLID **Collection Date:** 05/28/2014 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588	J	**0.472**	mg/Kg-dry	1	06/03/2014 12:01	99290
SW-846 7471B									
Mercury	NELAP	0.003	0.011		**0.075**	mg/Kg-dry	1	05/30/2014 10:42	99224
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.729	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
1,2-Dichlorobenzene	NELAP	0.872	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
1,3-Dichlorobenzene	NELAP	0.921	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
1,4-Dichlorobenzene	NELAP	0.872	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
2,4,5-Trichlorophenol	NELAP	0.521	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
2,4,6-Trichlorophenol	NELAP	0.691	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
2,4-Dichlorophenol	NELAP	0.663	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
2,4-Dimethylphenol	NELAP	0.696	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
2,4-Dinitrophenol	NELAP	0.587	5.48		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
2,4-Dinitrotoluene	NELAP	0.57	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
2,6-Dinitrotoluene	NELAP	0.592	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
2-Chloronaphthalene	NELAP	0.658	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
2-Chlorophenol	NELAP	0.696	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
2-Methylnaphthalene	NELAP	0.652	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
2-Nitroaniline	NELAP	0.499	5.48		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
2-Nitrophenol	NELAP	0.614	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
3,3´-Dichlorobenzidine	NELAP	1.1	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
3-Nitroaniline	NELAP	0.45	5.48		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
4,6-Dinitro-2-methylphenol	NELAP	0.592	5.48		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
4-Bromophenyl phenyl ether	NELAP	0.504	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
4-Chloro-3-methylphenol	NELAP	0.603	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
4-Chloroaniline	NELAP	0.663	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
4-Chlorophenyl phenyl ether	NELAP	0.543	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
4-Nitroaniline	NELAP	0.499	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
4-Nitrophenol	NELAP	0.537	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Acenaphthene	NELAP	0.092	0.186		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Acenaphthylene	NELAP	0.092	0.186		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Anthracene	NELAP	0.092	0.186		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Benzo(a)anthracene	NELAP	0.092	0.186		**0.198**	mg/Kg-dry	5	06/05/2014 12:48	99387
Benzo(a)pyrene	NELAP	0.092	0.186	J	**0.172**	mg/Kg-dry	5	06/05/2014 12:48	99387
Benzo(b)fluoranthene	NELAP	0.092	0.186		**0.202**	mg/Kg-dry	5	06/05/2014 12:48	99387
Benzo(g,h,i)perylene	NELAP	0.092	0.186		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Benzo(k)fluoranthene	NELAP	0.092	0.186		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Bis(2-chloroethoxy)methane	NELAP	0.641	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Bis(2-chloroethyl)ether	NELAP	0.778	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Bis(2-chloroisopropyl)ether	NELAP	0.625	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Bis(2-ethylhexyl)phthalate	NELAP	0.641	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Butyl benzyl phthalate	NELAP	0.554	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Carbazole		0.669	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Chrysene	NELAP	0.092	0.186	J	**0.152**	mg/Kg-dry	5	06/05/2014 12:48	99387
Dibenzo(a,h)anthracene	NELAP	0.092	0.186		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Dibenzofuran	NELAP	0.691	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Diethyl phthalate	NELAP	0.526	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-006 **Client Sample ID:** 2045-2-B21

Matrix: SOLID **Collection Date:** 05/28/2014 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Dimethyl phthalate	NELAP	0.499	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Di-n-butyl phthalate	NELAP	0.565	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Di-n-octyl phthalate	NELAP	0.57	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Fluoranthene	NELAP	0.092	0.186		**0.298**	mg/Kg-dry	5	06/05/2014 12:48	99387
Fluorene	NELAP	0.092	0.186		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Hexachlorobenzene	NELAP	0.537	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Hexachlorobutadiene	NELAP	0.85	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Hexachlorocyclopentadiene	NELAP	0.559	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Hexachloroethane	NELAP	0.916	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Indeno(1,2,3-cd)pyrene	NELAP	0.092	0.186		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Isophorone	NELAP	0.647	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
m,p-Cresol	NELAP	0.691	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Naphthalene	NELAP	0.092	0.186		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Nitrobenzene	NELAP	0.685	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
N-Nitroso-di-n-propylamine	NELAP	0.603	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
N-Nitrosodiphenylamine	NELAP	0.504	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
o-Cresol	NELAP	0.647	2.74		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Pentachlorophenol	NELAP	3.62	11		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Phenanthrene	NELAP	0.092	0.186	J	**0.172**	mg/Kg-dry	5	06/05/2014 12:48	99387
Phenol	NELAP	0.636	1.92		**ND**	mg/Kg-dry	5	06/05/2014 12:48	99387
Pyrene	NELAP	0.092	0.186		**0.324**	mg/Kg-dry	5	06/05/2014 12:48	99387
Surr: 2,4,6-Tribromophenol		0	33.7-105		**42.6**	%REC	5	06/05/2014 12:48	99387
Surr: 2-Fluorobiphenyl		0	24.2-75.3		**57.5**	%REC	5	06/05/2014 12:48	99387
Surr: 2-Fluorophenol		0	43-85.2		**49.2**	%REC	5	06/05/2014 12:48	99387
Surr: Nitrobenzene-d5		0	35.5-60.5		**48.4**	%REC	5	06/05/2014 12:48	99387
Surr: Phenol-d5		0	48.9-86.9		**54.8**	%REC	5	06/05/2014 12:48	99387
Surr: p-Terphenyl-d14		0	40.2-101		**66.3**	%REC	5	06/05/2014 12:48	99387
Elevated reporting limit due to sample extract composition.									
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
1,1,2,2-Tetrachloroethane	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
1,1,2-Trichloroethane	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
1,1-Dichloroethane	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
1,1-Dichloroethene	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
1,2-Dichloroethane	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
1,2-Dichloropropane	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
1,3-Dichloropropene, Total		0.0271	0.108		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
2-Butanone	NELAP	0.271	1.35		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
2-Hexanone	NELAP	0.271	1.35		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
4-Methyl-2-pentanone	NELAP	0.271	1.35		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Acetone	NELAP	0.271	1.35		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Benzene	NELAP	0.0135	0.027		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Bromodichloromethane	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Bromoform	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Bromomethane	NELAP	0.0541	0.271		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Carbon disulfide	NELAP	0.0812	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Carbon tetrachloride	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-006 **Client Sample ID:** 2045-2-B21

Matrix: SOLID **Collection Date:** 05/28/2014 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chlorobenzene	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Chloroethane	NELAP	0.0541	0.271		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Chloroform	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Chloromethane	NELAP	0.0541	0.271		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
cis-1,2-Dichloroethene	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
cis-1,3-Dichloropropene	NELAP	0.0271	0.108		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Dibromochloromethane	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Ethylbenzene	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
m,p-Xylenes	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Methyl tert-butyl ether	NELAP	0.0135	0.054		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Methylene chloride	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
o-Xylene	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Styrene	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Tetrachloroethene	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Toluene	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
trans-1,2-Dichloroethene	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
trans-1,3-Dichloropropene	NELAP	0.0271	0.108		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Trichloroethene	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Vinyl acetate	NELAP	0.541	1.35		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Vinyl chloride	NELAP	0.0135	0.054		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Xylenes, Total	NELAP	0.0271	0.135		**ND**	mg/Kg-dry	12.5	06/03/2014 14:22	99355
Surr: 1,2-Dichloroethane-d4		0	72.2-131		**100.4**	%REC	12.5	06/03/2014 14:22	99355
Surr: 4-Bromofluorobenzene		0	82.1-116		**101.3**	%REC	12.5	06/03/2014 14:22	99355
Surr: Dibromofluoromethane		0	77.7-120		**97**	%REC	12.5	06/03/2014 14:22	99355
Surr: Toluene-d8		0	86-116		**98.3**	%REC	12.5	06/03/2014 14:22	99355

Elevated reporting limit due to matrix interference.

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-010 **Client Sample ID:** 2045-2-B24

Matrix: SOLID **Collection Date:** 05/28/2014 13:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		**14.2**	%	1	05/30/2014 14:19	R191369
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		**85.8**	%	1	05/30/2014 14:19	R191369
SW-846 9045C									
pH (1:1)	NELAP	0	1		**8.95**		1	05/30/2014 20:57	R191357
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Lead	NELAP	0.006	0.007		**0.0231**	mg/L	1	06/04/2014 13:28	99345
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	**0.0257**	mg/L	1	06/02/2014 12:44	99260
Beryllium	NELAP	0.0003	0.001		**< 0.001**	mg/L	1	06/02/2014 12:44	99260
Boron	NELAP	1	2		**< 2**	mg/L	1	06/02/2014 12:44	99260
Cadmium	NELAP	0.0003	0.002		**< 0.002**	mg/L	1	06/02/2014 12:44	99260
Chromium	NELAP	0.004	0.01	J	**0.0043**	mg/L	1	06/02/2014 12:44	99260
Cobalt	NELAP	0.0022	0.01		**< 0.01**	mg/L	1	06/02/2014 12:44	99260
Iron	NELAP	0.007	0.02		**3.97**	mg/L	1	06/02/2014 12:44	99260
Lead	NELAP	0.006	0.007	X	**0.0541**	mg/L	1	06/02/2014 12:44	99260
Manganese	NELAP	0.0016	0.005		**0.0554**	mg/L	1	06/02/2014 12:44	99260
Nickel	NELAP	0.0033	0.01	J	**0.0064**	mg/L	1	06/02/2014 12:44	99260
Selenium	NELAP	0.022	0.05		**< 0.05**	mg/L	1	06/02/2014 12:44	99260
Silver	NELAP	0.003	0.01		**< 0.01**	mg/L	1	06/02/2014 12:44	99260
Zinc	NELAP	0.0021	0.01		**0.124**	mg/L	1	06/02/2014 12:44	99260
SW-846 1312, 3020A, 7010 METALS IN SPLP EXTRACT BY GFAA									
Antimony, SPLP by GFAA	NELAP	0.0017	0.005	J	**0.0017**	mg/L	1	05/30/2014 17:10	99263
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		**< 0.002**	mg/L	1	06/02/2014 12:40	99263
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002	J	**0.00011**	mg/L	1	06/02/2014 12:30	99280
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.55	4.9	J	**3.79**	mg/Kg-dry	1	06/03/2014 7:27	99292
Arsenic	NELAP	1.23	2.45		**5.57**	mg/Kg-dry	1	06/02/2014 19:52	99275
Barium	NELAP	0.25	0.49		**58.1**	mg/Kg-dry	1	06/02/2014 19:52	99275
Beryllium	NELAP	0.05	0.1		**0.58**	mg/Kg-dry	1	06/02/2014 19:52	99275
Boron	NELAP	0.98	1.96		**15.7**	mg/Kg-dry	1	06/02/2014 19:52	99275
Cadmium	NELAP	0.1	0.2		**0.2**	mg/Kg-dry	1	06/02/2014 19:52	99275
Calcium	NELAP	2.45	4.9		**77100**	mg/Kg-dry	1	06/02/2014 19:52	99275
Chromium	NELAP	0.49	0.98		**10.7**	mg/Kg-dry	1	06/02/2014 19:52	99275
Cobalt	NELAP	0.49	0.98		**5.01**	mg/Kg-dry	1	06/02/2014 19:52	99275
Copper	NELAP	0.49	0.98		**51.2**	mg/Kg-dry	1	06/02/2014 19:52	99275
Iron	NELAP	0.98	1.96	X	**18900**	mg/Kg-dry	1	06/02/2014 19:52	99275
Lead	NELAP	1.96	3.92		**80**	mg/Kg-dry	1	06/02/2014 19:52	99275
Magnesium	NELAP	0.49	0.98		**41500**	mg/Kg-dry	1	06/02/2014 19:52	99275
Manganese	NELAP	0.25	0.49	X	**717**	mg/Kg-dry	1	06/02/2014 19:52	99275
Nickel	NELAP	0.49	0.98		**17.3**	mg/Kg-dry	1	06/02/2014 19:52	99275
Potassium	NELAP	4.9	9.8		**857**	mg/Kg-dry	1	06/02/2014 19:52	99275
Silver	NELAP	0.49	0.54		**< 0.54**	mg/Kg-dry	1	06/02/2014 19:52	99275
Sodium	NELAP	2.45	4.9		**2370**	mg/Kg-dry	1	06/02/2014 19:52	99275
Thallium	NELAP	2.45	2.55		**< 2.55**	mg/Kg-dry	1	06/02/2014 19:52	99275

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-010 **Client Sample ID:** 2045-2-B24

Matrix: SOLID **Collection Date:** 05/28/2014 13:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.49	0.98		**15.1**	mg/Kg-dry	1	06/02/2014 19:52	99275
Zinc	NELAP	0.49	0.98		**157**	mg/Kg-dry	1	06/02/2014 19:52	99275
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588		**< 0.588**	mg/Kg-dry	1	06/03/2014 12:15	99290
SW-846 7471B									
Mercury	NELAP	0.003	0.011		**0.252**	mg/Kg-dry	1	05/30/2014 10:56	99224
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	1.53	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
1,2-Dichlorobenzene	NELAP	1.83	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
1,3-Dichlorobenzene	NELAP	1.93	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
1,4-Dichlorobenzene	NELAP	1.83	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
2,4,5-Trichlorophenol	NELAP	1.09	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
2,4,6-Trichlorophenol	NELAP	1.45	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
2,4-Dichlorophenol	NELAP	1.39	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
2,4-Dimethylphenol	NELAP	1.46	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
2,4-Dinitrophenol	NELAP	1.23	11.5		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
2,4-Dinitrotoluene	NELAP	1.19	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
2,6-Dinitrotoluene	NELAP	1.24	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
2-Chloronaphthalene	NELAP	1.38	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
2-Chlorophenol	NELAP	1.46	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
2-Methylnaphthalene	NELAP	1.37	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
2-Nitroaniline	NELAP	1.04	11.5		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
2-Nitrophenol	NELAP	1.29	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
3,3´-Dichlorobenzidine	NELAP	2.3	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
3-Nitroaniline	NELAP	0.942	11.5		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
4,6-Dinitro-2-methylphenol	NELAP	1.24	11.5		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
4-Bromophenyl phenyl ether	NELAP	1.06	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
4-Chloro-3-methylphenol	NELAP	1.26	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
4-Chloroaniline	NELAP	1.39	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
4-Chlorophenyl phenyl ether	NELAP	1.14	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
4-Nitroaniline	NELAP	1.04	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
4-Nitrophenol	NELAP	1.13	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Acenaphthene	NELAP	0.192	0.39		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Acenaphthylene	NELAP	0.192	0.39		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Anthracene	NELAP	0.192	0.39		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Benzo(a)anthracene	NELAP	0.192	0.39		**0.984**	mg/Kg-dry	10	06/05/2014 15:42	99387
Benzo(a)pyrene	NELAP	0.192	0.39		**0.863**	mg/Kg-dry	10	06/05/2014 15:42	99387
Benzo(b)fluoranthene	NELAP	0.192	0.39		**0.958**	mg/Kg-dry	10	06/05/2014 15:42	99387
Benzo(g,h,i)perylene	NELAP	0.192	0.39		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Benzo(k)fluoranthene	NELAP	0.192	0.39	J	**0.382**	mg/Kg-dry	10	06/05/2014 15:42	99387
Bis(2-chloroethoxy)methane	NELAP	1.34	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Bis(2-chloroethyl)ether	NELAP	1.63	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Bis(2-chloroisopropyl)ether	NELAP	1.31	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Bis(2-ethylhexyl)phthalate	NELAP	1.34	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Butyl benzyl phthalate	NELAP	1.16	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Carbazole		1.4	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Chrysene	NELAP	0.192	0.39		**0.931**	mg/Kg-dry	10	06/05/2014 15:42	99387

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-010 **Client Sample ID:** 2045-2-B24

Matrix: SOLID **Collection Date:** 05/28/2014 13:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Dibenzo(a,h)anthracene	NELAP	0.192	0.39		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Dibenzofuran	NELAP	1.45	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Diethyl phthalate	NELAP	1.1	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Dimethyl phthalate	NELAP	1.04	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Di-n-butyl phthalate	NELAP	1.18	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Di-n-octyl phthalate	NELAP	1.19	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Fluoranthene	NELAP	0.192	0.39		**1.34**	mg/Kg-dry	10	06/05/2014 15:42	99387
Fluorene	NELAP	0.192	0.39		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Hexachlorobenzene	NELAP	1.13	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Hexachlorobutadiene	NELAP	1.78	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Hexachlorocyclopentadiene	NELAP	1.17	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Hexachloroethane	NELAP	1.92	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Indeno(1,2,3-cd)pyrene	NELAP	0.192	0.39		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Isophorone	NELAP	1.35	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
m,p-Cresol	NELAP	1.45	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Naphthalene	NELAP	0.192	0.39		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Nitrobenzene	NELAP	1.44	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
N-Nitroso-di-n-propylamine	NELAP	1.26	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
N-Nitrosodiphenylamine	NELAP	1.06	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
o-Cresol	NELAP	1.35	5.74		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Pentachlorophenol	NELAP	7.58	23		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Phenanthrene	NELAP	0.192	0.39		**0.604**	mg/Kg-dry	10	06/05/2014 15:42	99387
Phenol	NELAP	1.33	4.02		**ND**	mg/Kg-dry	10	06/05/2014 15:42	99387
Pyrene	NELAP	0.192	0.39		**1.88**	mg/Kg-dry	10	06/05/2014 15:42	99387
Surr: 2,4,6-Tribromophenol		0	33.7-105		**46.4**	%REC	10	06/05/2014 15:42	99387
Surr: 2-Fluorobiphenyl		0	24.2-75.3		**58.8**	%REC	10	06/05/2014 15:42	99387
Surr: 2-Fluorophenol		0	43-85.2		**55**	%REC	10	06/05/2014 15:42	99387
Surr: Nitrobenzene-d5		0	35.5-60.5		**49.4**	%REC	10	06/05/2014 15:42	99387
Surr: Phenol-d5		0	48.9-86.9		**61.5**	%REC	10	06/05/2014 15:42	99387
Surr: p-Terphenyl-d14		0	40.2-101		**66.2**	%REC	10	06/05/2014 15:42	99387
Elevated reporting limit due to sample extract composition.									
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
1,1,2,2-Tetrachloroethane	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
1,1,2-Trichloroethane	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
1,1-Dichloroethane	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
1,1-Dichloroethene	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
1,2-Dichloroethane	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
1,2-Dichloropropane	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
1,3-Dichloropropene, Total		0.0329	0.132		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
2-Butanone	NELAP	0.329	1.65		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
2-Hexanone	NELAP	0.329	1.65		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
4-Methyl-2-pentanone	NELAP	0.329	1.65		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Acetone	NELAP	0.329	1.65		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Benzene	NELAP	0.0165	0.033		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Bromodichloromethane	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Bromoform	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-010 **Client Sample ID:** 2045-2-B24

Matrix: SOLID **Collection Date:** 05/28/2014 13:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0659	0.329		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Carbon disulfide	NELAP	0.0988	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Carbon tetrachloride	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Chlorobenzene	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Chloroethane	NELAP	0.0659	0.329		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Chloroform	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Chloromethane	NELAP	0.0659	0.329		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
cis-1,2-Dichloroethene	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
cis-1,3-Dichloropropene	NELAP	0.0329	0.132		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Dibromochloromethane	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Ethylbenzene	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
m,p-Xylenes	NELAP	0.0329	0.165	J	**0.033**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Methyl tert-butyl ether	NELAP	0.0165	0.066		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Methylene chloride	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
o-Xylene	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Styrene	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Tetrachloroethene	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Toluene	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
trans-1,2-Dichloroethene	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
trans-1,3-Dichloropropene	NELAP	0.0329	0.132		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Trichloroethene	NELAP	0.0329	0.165		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Vinyl acetate	NELAP	0.659	1.65		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Vinyl chloride	NELAP	0.0165	0.066		**ND**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Xylenes, Total	NELAP	0.0329	0.165	J	**0.033**	mg/Kg-dry	12.5	06/03/2014 16:10	99355
Surr: 1,2-Dichloroethane-d4		0	72.2-131		**99.4**	%REC	12.5	06/03/2014 16:10	99355
Surr: 4-Bromofluorobenzene		0	82.1-116		**100.5**	%REC	12.5	06/03/2014 16:10	99355
Surr: Dibromofluoromethane		0	77.7-120		**95**	%REC	12.5	06/03/2014 16:10	99355
Surr: Toluene-d8		0	86-116		**101.7**	%REC	12.5	06/03/2014 16:10	99355

Elevated reporting limit due to matrix interference.

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-013 **Client Sample ID:** 2045-2-B01-1

Matrix: SOLID **Collection Date:** 05/28/2014 10:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		**15.6**	%	1	05/30/2014 14:20	R191369
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		**84.4**	%	1	05/30/2014 14:20	R191369
SW-846 9045C									
pH (1:1)	NELAP	0	1		**8.08**		1	05/30/2014 21:08	R191357
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		**< 0.05**	mg/L	1	06/02/2014 13:13	99260
Beryllium	NELAP	0.0003	0.001		**< 0.001**	mg/L	1	06/02/2014 13:13	99260
Boron	NELAP	1	2		**< 2**	mg/L	1	06/02/2014 13:13	99260
Cadmium	NELAP	0.0003	0.002		**< 0.002**	mg/L	1	06/02/2014 13:13	99260
Chromium	NELAP	0.004	0.01		**< 0.01**	mg/L	1	06/02/2014 13:13	99260
Cobalt	NELAP	0.0022	0.01		**< 0.01**	mg/L	1	06/02/2014 13:13	99260
Iron	NELAP	0.007	0.02	J	**0.0148**	mg/L	1	06/02/2014 13:13	99260
Lead	NELAP	0.006	0.007		**< 0.007**	mg/L	1	06/02/2014 13:13	99260
Manganese	NELAP	0.0016	0.005		**< 0.005**	mg/L	1	06/02/2014 13:13	99260
Nickel	NELAP	0.0033	0.01		**< 0.01**	mg/L	1	06/02/2014 13:13	99260
Selenium	NELAP	0.022	0.05		**< 0.05**	mg/L	1	06/02/2014 13:13	99260
Silver	NELAP	0.003	0.01		**< 0.01**	mg/L	1	06/02/2014 13:13	99260
Zinc	NELAP	0.0021	0.01		**< 0.01**	mg/L	1	06/02/2014 13:13	99260
SW-846 1312, 3020A, 7010 METALS IN SPLP EXTRACT BY GFAA									
Antimony, SPLP by GFAA	NELAP	0.0017	0.005		**< 0.005**	mg/L	1	05/30/2014 17:33	99263
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		**< 0.002**	mg/L	1	06/02/2014 12:54	99263
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		**< 0.0002**	mg/L	1	06/02/2014 12:39	99280
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.55	4.9		**< 4.9**	mg/Kg-dry	1	06/03/2014 7:45	99292
Arsenic	NELAP	1.23	2.45		**8.06**	mg/Kg-dry	1	06/02/2014 20:03	99275
Barium	NELAP	0.25	0.49		**52.5**	mg/Kg-dry	1	06/02/2014 20:03	99275
Beryllium	NELAP	0.05	0.1		**0.84**	mg/Kg-dry	1	06/02/2014 20:03	99275
Boron	NELAP	0.98	1.96		**29.2**	mg/Kg-dry	1	06/02/2014 20:03	99275
Cadmium	NELAP	0.1	0.49		**< 0.49**	mg/Kg-dry	1	06/02/2014 20:03	99275
Calcium	NELAP	2.45	4.9		**68700**	mg/Kg-dry	1	06/02/2014 20:03	99275
Chromium	NELAP	0.49	0.98	X	**21.2**	mg/Kg-dry	1	06/02/2014 20:03	99275
Cobalt	NELAP	0.49	0.98		**10.7**	mg/Kg-dry	1	06/02/2014 20:03	99275
Copper	NELAP	0.49	0.98		**27.2**	mg/Kg-dry	1	06/02/2014 20:03	99275
Iron	NELAP	0.98	1.96	X	**26600**	mg/Kg-dry	1	06/02/2014 20:03	99275
Lead	NELAP	1.96	3.92		**12**	mg/Kg-dry	1	06/02/2014 20:03	99275
Magnesium	NELAP	0.49	0.98		**22400**	mg/Kg-dry	1	06/02/2014 20:03	99275
Manganese	NELAP	0.25	0.49		**356**	mg/Kg-dry	1	06/02/2014 20:03	99275
Nickel	NELAP	0.49	0.98		**31.7**	mg/Kg-dry	1	06/02/2014 20:03	99275
Potassium	NELAP	4.9	9.8		**3290**	mg/Kg-dry	1	06/02/2014 20:03	99275
Silver	NELAP	0.49	0.54		**< 0.54**	mg/Kg-dry	1	06/02/2014 20:03	99275
Sodium	NELAP	2.45	4.9		**400**	mg/Kg-dry	1	06/02/2014 20:03	99275
Thallium	NELAP	2.45	2.55		**< 2.55**	mg/Kg-dry	1	06/02/2014 20:03	99275
Vanadium	NELAP	0.49	0.98		**25.6**	mg/Kg-dry	1	06/02/2014 20:03	99275
Zinc	NELAP	0.49	0.98		**70.4**	mg/Kg-dry	1	06/02/2014 20:03	99275

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-013 **Client Sample ID:** 2045-2-B01-1

Matrix: SOLID **Collection Date:** 05/28/2014 10:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.33	0.566		**< 0.566**	mg/Kg-dry	1	06/03/2014 12:25	99290
SW-846 7471B									
Mercury	NELAP	0.003	0.012		**0.013**	mg/Kg-dry	1	05/30/2014 11:07	99224
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.156	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
1,2-Dichlorobenzene	NELAP	0.187	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
1,3-Dichlorobenzene	NELAP	0.197	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
1,4-Dichlorobenzene	NELAP	0.187	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
2,4,5-Trichlorophenol	NELAP	0.112	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
2,4,6-Trichlorophenol	NELAP	0.148	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
2,4-Dichlorophenol	NELAP	0.142	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
2,4-Dimethylphenol	NELAP	0.149	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
2,4-Dinitrophenol	NELAP	0.126	1.17		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
2,4-Dinitrotoluene	NELAP	0.122	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
2,6-Dinitrotoluene	NELAP	0.127	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
2-Chloronaphthalene	NELAP	0.141	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
2-Chlorophenol	NELAP	0.149	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
2-Methylnaphthalene	NELAP	0.14	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
2-Nitroaniline	NELAP	0.107	1.17		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
2-Nitrophenol	NELAP	0.132	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
3,3´-Dichlorobenzidine	NELAP	0.235	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
3-Nitroaniline	NELAP	0.096	1.17		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
4,6-Dinitro-2-methylphenol	NELAP	0.127	1.17		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
4-Bromophenyl phenyl ether	NELAP	0.108	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
4-Chloro-3-methylphenol	NELAP	0.129	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
4-Chloroaniline	NELAP	0.142	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
4-Chlorophenyl phenyl ether	NELAP	0.116	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
4-Nitroaniline	NELAP	0.107	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
4-Nitrophenol	NELAP	0.115	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Acenaphthene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Acenaphthylene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Anthracene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Benzo(a)anthracene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Benzo(a)pyrene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Benzo(b)fluoranthene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Benzo(g,h,i)perylene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Benzo(k)fluoranthene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Bis(2-chloroethoxy)methane	NELAP	0.137	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Bis(2-chloroethyl)ether	NELAP	0.167	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Bis(2-chloroisopropyl)ether	NELAP	0.134	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Bis(2-ethylhexyl)phthalate	NELAP	0.137	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Butyl benzyl phthalate	NELAP	0.119	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Carbazole		0.143	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Chrysene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Dibenzo(a,h)anthracene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Dibenzofuran	NELAP	0.148	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Diethyl phthalate	NELAP	0.113	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-013 **Client Sample ID:** 2045-2-B01-1

Matrix: SOLID **Collection Date:** 05/28/2014 10:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Dimethyl phthalate	NELAP	0.107	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Di-n-butyl phthalate	NELAP	0.121	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Di-n-octyl phthalate	NELAP	0.122	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Fluoranthene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Fluorene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Hexachlorobenzene	NELAP	0.115	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Hexachlorobutadiene	NELAP	0.182	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Hexachlorocyclopentadiene	NELAP	0.12	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Hexachloroethane	NELAP	0.196	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Isophorone	NELAP	0.139	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
m,p-Cresol	NELAP	0.148	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Naphthalene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Nitrobenzene	NELAP	0.147	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
N-Nitroso-di-n-propylamine	NELAP	0.129	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
N-Nitrosodiphenylamine	NELAP	0.108	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
o-Cresol	NELAP	0.139	0.587		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Pentachlorophenol	NELAP	0.775	2.35		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Phenanthrene	NELAP	0.02	0.04		**0.048**	mg/Kg-dry	1	06/09/2014 13:13	99474
Phenol	NELAP	0.136	0.411		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Pyrene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/09/2014 13:13	99474
Surr: 2,4,6-Tribromophenol		0	33.7-105		**57.8**	%REC	1	06/09/2014 13:13	99474
Surr: 2-Fluorobiphenyl		0	24.2-75.3		**55.9**	%REC	1	06/09/2014 13:13	99474
Surr: 2-Fluorophenol		0	43-85.2		**43.5**	%REC	1	06/09/2014 13:13	99474
Surr: Nitrobenzene-d5		0	35.5-60.5		**50.8**	%REC	1	06/09/2014 13:13	99474
Surr: Phenol-d5		0	48.9-86.9		**52.9**	%REC	1	06/09/2014 13:13	99474
Surr: p-Terphenyl-d14		0	40.2-101		**76.5**	%REC	1	06/09/2014 13:13	99474
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
1,1,2,2-Tetrachloroethane	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
1,1,2-Trichloroethane	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
1,1-Dichloroethane	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
1,1-Dichloroethene	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
1,2-Dichloroethane	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
1,2-Dichloropropane	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
1,3-Dichloropropene, Total		0.0354	0.142		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
2-Butanone	NELAP	0.354	1.77		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
2-Hexanone	NELAP	0.354	1.77		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
4-Methyl-2-pentanone	NELAP	0.354	1.77		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Acetone	NELAP	0.354	1.77		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Benzene	NELAP	0.0177	0.035		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Bromodichloromethane	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Bromoform	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Bromomethane	NELAP	0.0709	0.354		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Carbon disulfide	NELAP	0.106	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Carbon tetrachloride	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Chlorobenzene	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-013 **Client Sample ID:** 2045-2-B01-1

Matrix: SOLID **Collection Date:** 05/28/2014 10:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0709	0.354		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Chloroform	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Chloromethane	NELAP	0.0709	0.354		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
cis-1,2-Dichloroethene	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
cis-1,3-Dichloropropene	NELAP	0.0354	0.142		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Dibromochloromethane	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Ethylbenzene	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
m,p-Xylenes	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Methyl tert-butyl ether	NELAP	0.0177	0.071		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Methylene chloride	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
o-Xylene	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Styrene	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Tetrachloroethene	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Toluene	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
trans-1,2-Dichloroethene	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
trans-1,3-Dichloropropene	NELAP	0.0354	0.142		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Trichloroethene	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Vinyl acetate	NELAP	0.709	1.77		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Vinyl chloride	NELAP	0.0177	0.071		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Xylenes, Total	NELAP	0.0354	0.177		**ND**	mg/Kg-dry	12.5	06/04/2014 10:40	99419
Surr: 1,2-Dichloroethane-d4		0	72.2-131		**94.1**	%REC	12.5	06/04/2014 10:40	99419
Surr: 4-Bromofluorobenzene		0	82.1-116		**97.1**	%REC	12.5	06/04/2014 10:40	99419
Surr: Dibromofluoromethane		0	77.7-120		**92.6**	%REC	12.5	06/04/2014 10:40	99419
Surr: Toluene-d8		0	86-116		**99.9**	%REC	12.5	06/04/2014 10:40	99419

Elevated reporting limit due to matrix interference.

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-014 **Client Sample ID:** 2045-2-B01-2

Matrix: SOLID **Collection Date:** 05/28/2014 10:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		**15**	%	1	05/30/2014 14:20	R191369
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		**85**	%	1	05/30/2014 14:20	R191369
SW-846 9045C									
pH (1:1)	NELAP	0	1		**8.85**		1	05/30/2014 21:10	R191357
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		**< 0.05**	mg/L	1	06/02/2014 13:16	99260
Beryllium	NELAP	0.0003	0.001		**< 0.001**	mg/L	1	06/02/2014 13:16	99260
Boron	NELAP	1	2		**< 2**	mg/L	1	06/02/2014 13:16	99260
Cadmium	NELAP	0.0003	0.002		**< 0.002**	mg/L	1	06/02/2014 13:16	99260
Chromium	NELAP	0.004	0.01		**< 0.01**	mg/L	1	06/02/2014 13:16	99260
Cobalt	NELAP	0.0022	0.01		**< 0.01**	mg/L	1	06/02/2014 13:16	99260
Iron	NELAP	0.007	0.02		**0.336**	mg/L	1	06/02/2014 13:16	99260
Lead	NELAP	0.006	0.007		**< 0.007**	mg/L	1	06/02/2014 13:16	99260
Manganese	NELAP	0.0016	0.005	J	**0.0043**	mg/L	1	06/02/2014 13:16	99260
Nickel	NELAP	0.0033	0.01		**< 0.01**	mg/L	1	06/02/2014 13:16	99260
Selenium	NELAP	0.022	0.05		**< 0.05**	mg/L	1	06/02/2014 13:16	99260
Silver	NELAP	0.003	0.01		**< 0.01**	mg/L	1	06/02/2014 13:16	99260
Zinc	NELAP	0.0021	0.01		**< 0.01**	mg/L	1	06/02/2014 13:16	99260
SW-846 1312, 3020A, 7010 METALS IN SPLP EXTRACT BY GFAA									
Antimony, SPLP by GFAA	NELAP	0.0017	0.005	J	**0.0023**	mg/L	1	05/30/2014 17:36	99263
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		**< 0.002**	mg/L	1	06/02/2014 12:57	99263
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		**< 0.0002**	mg/L	1	06/02/2014 12:42	99280
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.41	4.63		**< 4.63**	mg/Kg-dry	1	06/03/2014 7:51	99292
Arsenic	NELAP	1.18	2.36		**9.26**	mg/Kg-dry	1	06/02/2014 20:06	99275
Barium	NELAP	0.24	0.47		**57.7**	mg/Kg-dry	1	06/02/2014 20:06	99275
Beryllium	NELAP	0.05	0.09		**0.68**	mg/Kg-dry	1	06/02/2014 20:06	99275
Boron	NELAP	0.94	1.89		**25.4**	mg/Kg-dry	1	06/02/2014 20:06	99275
Cadmium	NELAP	0.09	0.47		**< 0.47**	mg/Kg-dry	1	06/02/2014 20:06	99275
Calcium	NELAP	2.36	4.72	S	**57500**	mg/Kg-dry	1	06/02/2014 20:06	99275
Chromium	NELAP	0.47	0.94	X	**19.2**	mg/Kg-dry	1	06/02/2014 20:06	99275
Cobalt	NELAP	0.47	0.94		**12.7**	mg/Kg-dry	1	06/02/2014 20:06	99275
Copper	NELAP	0.47	0.94		**36.5**	mg/Kg-dry	1	06/02/2014 20:06	99275
Iron	NELAP	0.94	1.89	SX	**25400**	mg/Kg-dry	1	06/02/2014 20:06	99275
Lead	NELAP	1.89	3.77		**19.5**	mg/Kg-dry	1	06/02/2014 20:06	99275
Magnesium	NELAP	0.47	0.94	S	**28800**	mg/Kg-dry	1	06/02/2014 20:06	99275
Manganese	NELAP	0.24	0.47	S	**429**	mg/Kg-dry	1	06/02/2014 20:06	99275
Nickel	NELAP	0.47	0.94		**34.5**	mg/Kg-dry	1	06/02/2014 20:06	99275
Potassium	NELAP	4.72	9.43	S	**3360**	mg/Kg-dry	1	06/02/2014 20:06	99275
Silver	NELAP	0.47	0.52		**< 0.52**	mg/Kg-dry	1	06/02/2014 20:06	99275
Sodium	NELAP	2.36	4.72		**648**	mg/Kg-dry	1	06/02/2014 20:06	99275
Thallium	NELAP	2.36	2.45		**< 2.45**	mg/Kg-dry	1	06/02/2014 20:06	99275
Vanadium	NELAP	0.47	0.94		**22.1**	mg/Kg-dry	1	06/02/2014 20:06	99275
Zinc	NELAP	0.47	0.94		**54.9**	mg/Kg-dry	1	06/02/2014 20:06	99275

MS QC limits for Ca, Fe, Mg, Mn, and K are not applicable due to high sample/spike ratio.

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-014 **Client Sample ID:** 2045-2-B01-2

Matrix: SOLID **Collection Date:** 05/28/2014 10:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588	S	**< 0.588**	mg/Kg-dry	1	06/03/2014 12:28	99290
Se - Matrix interference present in sample. Confirmed by bench spike.									
SW-846 7471B									
Mercury	NELAP	0.003	0.011		**0.022**	mg/Kg-dry	1	05/30/2014 11:09	99224
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.156	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
1,2-Dichlorobenzene	NELAP	0.186	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
1,3-Dichlorobenzene	NELAP	0.197	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
1,4-Dichlorobenzene	NELAP	0.186	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
2,4,5-Trichlorophenol	NELAP	0.111	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
2,4,6-Trichlorophenol	NELAP	0.148	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
2,4-Dichlorophenol	NELAP	0.142	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
2,4-Dimethylphenol	NELAP	0.149	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
2,4-Dinitrophenol	NELAP	0.125	1.17		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
2,4-Dinitrotoluene	NELAP	0.122	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
2,6-Dinitrotoluene	NELAP	0.127	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
2-Chloronaphthalene	NELAP	0.141	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
2-Chlorophenol	NELAP	0.149	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
2-Methylnaphthalene	NELAP	0.139	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
2-Nitroaniline	NELAP	0.107	1.17		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
2-Nitrophenol	NELAP	0.131	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
3,3´-Dichlorobenzidine	NELAP	0.234	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
3-Nitroaniline	NELAP	0.096	1.17		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
4,6-Dinitro-2-methylphenol	NELAP	0.127	1.17		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
4-Bromophenyl phenyl ether	NELAP	0.108	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
4-Chloro-3-methylphenol	NELAP	0.129	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
4-Chloroaniline	NELAP	0.142	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
4-Chlorophenyl phenyl ether	NELAP	0.116	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
4-Nitroaniline	NELAP	0.107	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
4-Nitrophenol	NELAP	0.115	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Acenaphthene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Acenaphthylene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Anthracene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Benzo(a)anthracene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Benzo(a)pyrene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Benzo(b)fluoranthene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Benzo(g,h,i)perylene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Benzo(k)fluoranthene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Bis(2-chloroethoxy)methane	NELAP	0.137	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Bis(2-chloroethyl)ether	NELAP	0.166	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Bis(2-chloroisopropyl)ether	NELAP	0.134	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Bis(2-ethylhexyl)phthalate	NELAP	0.137	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Butyl benzyl phthalate	NELAP	0.118	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Carbazole		0.143	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Chrysene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Dibenzo(a,h)anthracene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Dibenzofuran	NELAP	0.148	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-014 **Client Sample ID:** 2045-2-B01-2

Matrix: SOLID **Collection Date:** 05/28/2014 10:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Diethyl phthalate	NELAP	0.113	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Dimethyl phthalate	NELAP	0.107	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Di-n-butyl phthalate	NELAP	0.121	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Di-n-octyl phthalate	NELAP	0.122	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Fluoranthene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Fluorene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Hexachlorobenzene	NELAP	0.115	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Hexachlorobutadiene	NELAP	0.182	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Hexachlorocyclopentadiene	NELAP	0.12	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Hexachloroethane	NELAP	0.196	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Isophorone	NELAP	0.138	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
m,p-Cresol	NELAP	0.148	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Naphthalene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Nitrobenzene	NELAP	0.146	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
N-Nitroso-di-n-propylamine	NELAP	0.129	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
N-Nitrosodiphenylamine	NELAP	0.108	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
o-Cresol	NELAP	0.138	0.586		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Pentachlorophenol	NELAP	0.773	2.34		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Phenanthrene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Phenol	NELAP	0.136	0.41		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Pyrene	NELAP	0.02	0.04		**ND**	mg/Kg-dry	1	06/05/2014 2:29	99387
Surr: 2,4,6-Tribromophenol		0	33.7-105		**45.8**	%REC	1	06/05/2014 2:29	99387
Surr: 2-Fluorobiphenyl		0	24.2-75.3		**52.3**	%REC	1	06/05/2014 2:29	99387
Surr: 2-Fluorophenol		0	43-85.2		**56.5**	%REC	1	06/05/2014 2:29	99387
Surr: Nitrobenzene-d5		0	35.5-60.5		**54.9**	%REC	1	06/05/2014 2:29	99387
Surr: Phenol-d5		0	48.9-86.9		**65.1**	%REC	1	06/05/2014 2:29	99387
Surr: p-Terphenyl-d14		0	40.2-101		**76.8**	%REC	1	06/05/2014 2:29	99387
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
1,1,2,2-Tetrachloroethane	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
1,1,2-Trichloroethane	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
1,1-Dichloroethane	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
1,1-Dichloroethene	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
1,2-Dichloroethane	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
1,2-Dichloropropane	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
1,3-Dichloropropene, Total		0.0227	0.091		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
2-Butanone	NELAP	0.227	1.14		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
2-Hexanone	NELAP	0.227	1.14		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
4-Methyl-2-pentanone	NELAP	0.227	1.14		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Acetone	NELAP	0.227	1.14		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Benzene	NELAP	0.0114	0.023		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Bromodichloromethane	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Bromoform	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Bromomethane	NELAP	0.0455	0.227		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Carbon disulfide	NELAP	0.0682	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Carbon tetrachloride	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-014 **Client Sample ID:** 2045-2-B01-2

Matrix: SOLID **Collection Date:** 05/28/2014 10:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chlorobenzene	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Chloroethane	NELAP	0.0455	0.227		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Chloroform	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Chloromethane	NELAP	0.0455	0.227		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
cis-1,2-Dichloroethene	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
cis-1,3-Dichloropropene	NELAP	0.0227	0.091		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Dibromochloromethane	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Ethylbenzene	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
m,p-Xylenes	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Methyl tert-butyl ether	NELAP	0.0114	0.045		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Methylene chloride	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
o-Xylene	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Styrene	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Tetrachloroethene	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Toluene	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
trans-1,2-Dichloroethene	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
trans-1,3-Dichloropropene	NELAP	0.0227	0.091		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Trichloroethene	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Vinyl acetate	NELAP	0.455	1.14		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Vinyl chloride	NELAP	0.0114	0.045		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Xylenes, Total	NELAP	0.0227	0.114		**ND**	mg/Kg-dry	12.5	06/04/2014 11:07	99419
Surr: 1,2-Dichloroethane-d4		0	72.2-131		**96.8**	%REC	12.5	06/04/2014 11:07	99419
Surr: 4-Bromofluorobenzene		0	82.1-116		**98.5**	%REC	12.5	06/04/2014 11:07	99419
Surr: Dibromofluoromethane		0	77.7-120		**92.5**	%REC	12.5	06/04/2014 11:07	99419
Surr: Toluene-d8		0	86-116		**101.6**	%REC	12.5	06/04/2014 11:07	99419

Elevated reporting limit due to matrix interference.

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-015 **Client Sample ID:** 2045-2-B01-3

Matrix: SOLID **Collection Date:** 05/28/2014 10:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		**18.4**	%	1	05/30/2014 14:21	R191369
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		**81.6**	%	1	05/30/2014 14:21	R191369
SW-846 9045C									
pH (1:1)	NELAP	0	1		**8.47**		1	05/30/2014 21:12	R191357
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		**< 0.05**	mg/L	1	06/02/2014 13:20	99260
Beryllium	NELAP	0.0003	0.001		**< 0.001**	mg/L	1	06/02/2014 13:20	99260
Boron	NELAP	1	2		**< 2**	mg/L	1	06/02/2014 13:20	99260
Cadmium	NELAP	0.0003	0.002		**< 0.002**	mg/L	1	06/02/2014 13:20	99260
Chromium	NELAP	0.004	0.01		**< 0.01**	mg/L	1	06/02/2014 13:20	99260
Cobalt	NELAP	0.0022	0.01		**< 0.01**	mg/L	1	06/02/2014 13:20	99260
Iron	NELAP	0.007	0.02		**0.559**	mg/L	1	06/02/2014 13:20	99260
Lead	NELAP	0.006	0.007		**< 0.007**	mg/L	1	06/02/2014 13:20	99260
Manganese	NELAP	0.0016	0.005		**0.0053**	mg/L	1	06/02/2014 13:20	99260
Nickel	NELAP	0.0033	0.01		**< 0.01**	mg/L	1	06/02/2014 13:20	99260
Selenium	NELAP	0.022	0.05		**< 0.05**	mg/L	1	06/02/2014 13:20	99260
Silver	NELAP	0.003	0.01		**< 0.01**	mg/L	1	06/02/2014 13:20	99260
Zinc	NELAP	0.0021	0.01		**< 0.01**	mg/L	1	06/02/2014 13:20	99260
SW-846 1312, 3020A, 7010 METALS IN SPLP EXTRACT BY GFAA									
Antimony, SPLP by GFAA	NELAP	0.0017	0.005	J	**0.002**	mg/L	1	05/30/2014 17:40	99263
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		**< 0.002**	mg/L	1	06/02/2014 13:01	99263
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		**< 0.0002**	mg/L	1	06/02/2014 12:44	99280
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		**< 4.81**	mg/Kg-dry	1	06/03/2014 8:10	99292
Arsenic	NELAP	1.2	2.4		**9.72**	mg/Kg-dry	1	06/02/2014 20:17	99275
Barium	NELAP	0.24	0.48		**42.8**	mg/Kg-dry	1	06/02/2014 20:17	99275
Beryllium	NELAP	0.05	0.1		**0.73**	mg/Kg-dry	1	06/02/2014 20:17	99275
Boron	NELAP	0.96	1.92		**22.5**	mg/Kg-dry	1	06/02/2014 20:17	99275
Cadmium	NELAP	0.1	0.48		**< 0.48**	mg/Kg-dry	1	06/02/2014 20:17	99275
Calcium	NELAP	2.4	4.81		**55800**	mg/Kg-dry	1	06/02/2014 20:17	99275
Chromium	NELAP	0.48	0.96	X	**19.5**	mg/Kg-dry	1	06/02/2014 20:17	99275
Cobalt	NELAP	0.48	0.96		**12.9**	mg/Kg-dry	1	06/02/2014 20:17	99275
Copper	NELAP	0.48	0.96		**39.6**	mg/Kg-dry	1	06/02/2014 20:17	99275
Iron	NELAP	0.96	1.92	X	**24400**	mg/Kg-dry	1	06/02/2014 20:17	99275
Lead	NELAP	1.92	3.85		**15.3**	mg/Kg-dry	1	06/02/2014 20:17	99275
Magnesium	NELAP	0.48	0.96		**27000**	mg/Kg-dry	1	06/02/2014 20:17	99275
Manganese	NELAP	0.24	0.48		**408**	mg/Kg-dry	1	06/02/2014 20:17	99275
Nickel	NELAP	0.48	0.96		**34.7**	mg/Kg-dry	1	06/02/2014 20:17	99275
Potassium	NELAP	4.81	9.62		**3520**	mg/Kg-dry	1	06/02/2014 20:17	99275
Silver	NELAP	0.48	0.53		**< 0.53**	mg/Kg-dry	1	06/02/2014 20:17	99275
Sodium	NELAP	2.4	4.81		**250**	mg/Kg-dry	1	06/02/2014 20:17	99275
Thallium	NELAP	2.4	2.5		**< 2.5**	mg/Kg-dry	1	06/02/2014 20:17	99275
Vanadium	NELAP	0.48	0.96		**22.4**	mg/Kg-dry	1	06/02/2014 20:17	99275
Zinc	NELAP	0.48	0.96		**42.8**	mg/Kg-dry	1	06/02/2014 20:17	99275

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-015 **Client Sample ID:** 2045-2-B01-3

Matrix: SOLID **Collection Date:** 05/28/2014 10:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.33	0.566		**< 0.566**	mg/Kg-dry	1	06/03/2014 12:49	99290
SW-846 7471B									
Mercury	NELAP	0.003	0.012		**0.029**	mg/Kg-dry	1	05/30/2014 11:16	99224
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.162	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
1,2-Dichlorobenzene	NELAP	0.194	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
1,3-Dichlorobenzene	NELAP	0.205	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
1,4-Dichlorobenzene	NELAP	0.194	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
2,4,5-Trichlorophenol	NELAP	0.116	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
2,4,6-Trichlorophenol	NELAP	0.154	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
2,4-Dichlorophenol	NELAP	0.147	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
2,4-Dimethylphenol	NELAP	0.155	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
2,4-Dinitrophenol	NELAP	0.13	1.22		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
2,4-Dinitrotoluene	NELAP	0.127	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
2,6-Dinitrotoluene	NELAP	0.132	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
2-Chloronaphthalene	NELAP	0.146	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
2-Chlorophenol	NELAP	0.155	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
2-Methylnaphthalene	NELAP	0.145	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
2-Nitroaniline	NELAP	0.111	1.22		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
2-Nitrophenol	NELAP	0.137	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
3,3´-Dichlorobenzidine	NELAP	0.244	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
3-Nitroaniline	NELAP	0.1	1.22		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
4,6-Dinitro-2-methylphenol	NELAP	0.132	1.22		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
4-Bromophenyl phenyl ether	NELAP	0.112	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
4-Chloro-3-methylphenol	NELAP	0.134	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
4-Chloroaniline	NELAP	0.147	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
4-Chlorophenyl phenyl ether	NELAP	0.121	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
4-Nitroaniline	NELAP	0.111	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
4-Nitrophenol	NELAP	0.119	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Acenaphthene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Acenaphthylene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Anthracene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Benzo(a)anthracene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Benzo(a)pyrene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Benzo(b)fluoranthene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Benzo(g,h,i)perylene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Benzo(k)fluoranthene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Bis(2-chloroethoxy)methane	NELAP	0.143	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Bis(2-chloroethyl)ether	NELAP	0.173	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Bis(2-chloroisopropyl)ether	NELAP	0.139	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Bis(2-ethylhexyl)phthalate	NELAP	0.143	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Butyl benzyl phthalate	NELAP	0.123	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Carbazole		0.149	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Chrysene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Dibenzo(a,h)anthracene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Dibenzofuran	NELAP	0.154	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Diethyl phthalate	NELAP	0.117	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-015 **Client Sample ID:** 2045-2-B01-3

Matrix: SOLID **Collection Date:** 05/28/2014 10:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Dimethyl phthalate	NELAP	0.111	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Di-n-butyl phthalate	NELAP	0.126	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Di-n-octyl phthalate	NELAP	0.127	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Fluoranthene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Fluorene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Hexachlorobenzene	NELAP	0.119	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Hexachlorobutadiene	NELAP	0.189	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Hexachlorocyclopentadiene	NELAP	0.124	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Hexachloroethane	NELAP	0.204	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Isophorone	NELAP	0.144	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
m,p-Cresol	NELAP	0.154	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Naphthalene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Nitrobenzene	NELAP	0.152	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
N-Nitroso-di-n-propylamine	NELAP	0.134	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
N-Nitrosodiphenylamine	NELAP	0.112	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
o-Cresol	NELAP	0.144	0.609		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Pentachlorophenol	NELAP	0.804	2.44		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Phenanthrene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Phenol	NELAP	0.141	0.427		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Pyrene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/05/2014 3:03	99387
Surr: 2,4,6-Tribromophenol		0	33.7-105		**44**	%REC	1	06/05/2014 3:03	99387
Surr: 2-Fluorobiphenyl		0	24.2-75.3		**47.3**	%REC	1	06/05/2014 3:03	99387
Surr: 2-Fluorophenol		0	43-85.2		**56.5**	%REC	1	06/05/2014 3:03	99387
Surr: Nitrobenzene-d5		0	35.5-60.5		**52.3**	%REC	1	06/05/2014 3:03	99387
Surr: Phenol-d5		0	48.9-86.9		**63.2**	%REC	1	06/05/2014 3:03	99387
Surr: p-Terphenyl-d14		0	40.2-101		**74.5**	%REC	1	06/05/2014 3:03	99387
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
1,1,2,2-Tetrachloroethane	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
1,1,2-Trichloroethane	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
1,1-Dichloroethane	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
1,1-Dichloroethene	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
1,2-Dichloroethane	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
1,2-Dichloropropane	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
1,3-Dichloropropene, Total		0.0247	0.099		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
2-Butanone	NELAP	0.247	1.23		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
2-Hexanone	NELAP	0.247	1.23		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
4-Methyl-2-pentanone	NELAP	0.247	1.23		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Acetone	NELAP	0.247	1.23		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Benzene	NELAP	0.0123	0.025		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Bromodichloromethane	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Bromoform	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Bromomethane	NELAP	0.0494	0.247		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Carbon disulfide	NELAP	0.074	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Carbon tetrachloride	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Chlorobenzene	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419

Client: Andrews Engineering, Inc. **Work Order:** 14051543

Client Project: IDOT2013-080 **Report Date:** 10-Jun-14

Lab ID: 14051543-015 **Client Sample ID:** 2045-2-B01-3

Matrix: SOLID **Collection Date:** 05/28/2014 10:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0494	0.247		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Chloroform	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Chloromethane	NELAP	0.0494	0.247		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
cis-1,2-Dichloroethene	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
cis-1,3-Dichloropropene	NELAP	0.0247	0.099		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Dibromochloromethane	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Ethylbenzene	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
m,p-Xylenes	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Methyl tert-butyl ether	NELAP	0.0123	0.049		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Methylene chloride	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
o-Xylene	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Styrene	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Tetrachloroethene	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Toluene	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
trans-1,2-Dichloroethene	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
trans-1,3-Dichloropropene	NELAP	0.0247	0.099		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Trichloroethene	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Vinyl acetate	NELAP	0.494	1.23		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Vinyl chloride	NELAP	0.0123	0.049		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Xylenes, Total	NELAP	0.0247	0.123		**ND**	mg/Kg-dry	12.5	06/04/2014 11:34	99419
Surr: 1,2-Dichloroethane-d4		0	72.2-131		**98.3**	%REC	12.5	06/04/2014 11:34	99419
Surr: 4-Bromofluorobenzene		0	82.1-116		**98.4**	%REC	12.5	06/04/2014 11:34	99419
Surr: Dibromofluoromethane		0	77.7-120		**95.5**	%REC	12.5	06/04/2014 11:34	99419
Surr: Toluene-d8		0	86-116		**99.8**	%REC	12.5	06/04/2014 11:34	99419

Elevated reporting limit due to matrix interference.

CHAIN OF CUSTODY RECORD

ANDREWS ENGINEERING INC

14051543

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: **TekLab, Inc.** Address: **5445 Horseshoe Lake Road** **Collinsville, IL 62234** Phone: **877-344-1003** Contact: **Shelly Hennessy** email: shennessy@teklabinc.com

Project Name: I-55 Chicago Cook Co

Project No.: IDOT 2013-080

TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other

Sampler: TT, JS

COC No.: 1 of 2

Lab Job No.: 14051543

Sample Temp: 5.0

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.

OK headspace. Add HNO_3 to 2045-2-G01 metals container ETP 5/29/14

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids	Waste Characterization					Comments
14051543-001	2045-2-B18-3	5/28/14	11:25	S	X	X					X	X	X	X						16-24
-002	2045-2-B19		11:35																	0-3.5
-003	2045-2-B20-1		11:45																	0-8
-004	2045-2-B20-2		11:50																	8-16
-005	2045-2-B20-3		11:55																	16-24
-006	2045-2-B21		12:00																	0-3.5
-007	2045-2-B22		12:05																	0-3.5
-008	2045-2-B22-DUP		12:10																	0-3.5
-009	2045-2-B23		12:15																	0-3.5
-010	2045-2-B24	5/28/14	13:05																	0-3.5
-011	2045-2-B25	↓	13:00																	0-3.5
-012	2045-2-B26	5/28/14	12:50	S	X	X					X	X	X	X						0-3.5

	Date/Time		Date/Time
Relinquished by:	5/28/14 15:45	Received by:	5-28-14 15:45
Relinquished by:	5-28-14 18:00	Received by: FedEx	5/29/14 857
Relinquished by:	Date/Time	Received by:	Date/Time

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: **TekLab, Inc.** Address: **5445 Horseshoe Lake Road** **Collinsville, IL 62234** Phone: **877-344-1003** Contact: **Shelly Hennessy** email: shennessy@teklabinc.com	Project Name: ISS CHICAGO COOK Co. Project No.: IDOT 2013-080 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other Sampler: TT, JS

COC No.: 1 of 2

Lab Job No.: 140515438

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
140515438-013	2045-2-B01-1	5/28/14	10:30	S	X	X					X	X	X	X						0-8
-014	2045-2-B01-2		10:40																	8-16
-015	2045-2-B01-3		10:45																	16-24
-016	2045-2-B02-1		13:25																	0-8
-017	2045-2-B02-2		13:30																	8-16
-018	2045-2-B02-3		13:40																	16-24
-019	2045-2-B18-1		11:15																	0-8
-020	2045-2-B18-2		11:20																	8-16
-021	2045-2-G01		14:10		X	X					X	X	X	X						0-24'
	2045-5-B24-1		10:55																	0-6'
	2045-5-B24-1-DUP		11:00																	0-6
	2045-5-B24-2	5/28/14	11:05	S	X	X					X	X	X	X						6-12'

Relinquished by:	Date/Time 5/28/14 15:45	Received by:	Date/Time 5-28-14 1545
Relinquished by:	Date/Time 5/29/14 15:00	Received by:	Date/Time 5/29/14 857
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: FAI 55 (I-55) @ Lake Shore Drive Office Phone Number, if available: _____

Physical Site Location (address, incldluding number and street):
I-55 ROW between Prairie Avenue & Lake Shore Drive

City: Chicago State: IL Zip Code: 60616

County: Cook Township: Chicago

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

Latitude: 41.84828 (Decimal Degrees) Longitude: -87.61694 (-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

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: FAI 55 (I-55) @ Lake Shore Drive

Latitude: 41.84828 Longitude: -87.61694

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)]:

SOIL BORINGS 2045-5-B12, -B13, & -B17 WERE SAMPLED ADJACENT TO SITE 2045-5. SEE FIGURES 2 & 3, AND TABLE 3b 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]:

TEKLAB WORK ORDER ID NO.'S: 14051473 & 14060468

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

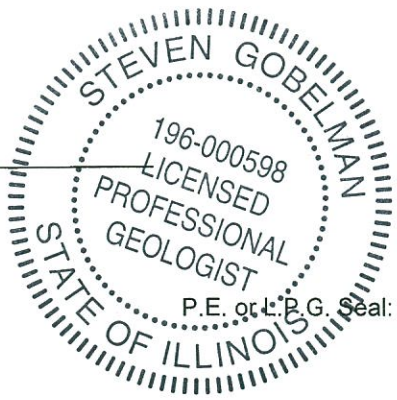
Phone: 217.785.4246

Steven Gobelman
Printed Name:

Licensed Professional Engineer or
Licensed Professional Geologist Signature:

12/1/14
Date:

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



THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl Acetate
Vinyl Chloride
Xylenes, total
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.

- If all samples at a site were below the most stringent MAC, the notation **“No Contaminants of Concern Noted”** is used.

The laboratory report for site soils follows this summary table.

ISGS Site 2045-5

I 55 ROW between Prairie Avenue and Lake Shore Drive

Sample ID	2045-5-B12		2045-5-B13-1		2045-5-B13-2		2045-5-B13-3		2045-5-B17-1		[1] Most Stringent MAC	[2] Outside a Populated Area MAC	[3] Populated non-Metropolitan Statistical Area MAC	[4] Within Chicago Corporate Limits MAC	[5] Metropolitan Statistical Area MAC	[6] Class I Soil TCLP/SPLP Comparisons Only
Sample Depth (ft)	0-8		0-8		8-16		16-24		0-5							
Sample Date	5/27/2014		5/27/2014		5/27/2014		5/27/2014		6/5/2014							
PID	0		0		0		0		0							
Sample pH	8.49		8.33		8.47		8		7.68							
Matrix	Soil		Soil		Soil		Soil		Soil							
Semivolatile Organic Compounds (soil: mg/kg; water: mg/L)																
Benzo(a)pyrene	ND		ND		ND		ND		**0.453**	**1,2**	0.09	0.09	0.98	1.3	2.1	NA

June 05, 2014

Colleen Grey
Andrews Engineering, Inc.
3300 Ginger Creek Drive
Springfield, IL 62711-7233
TEL: (217) 787-2334
FAX: (217) 787-9495

RE: IDOT2013-080 **WorkOrder:** 14051473

Dear Colleen Grey:

TEKLAB, INC received 15 samples on 5/28/2014 10:54:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Shelly A Hennessy

Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com

Report Contents

Client: Andrews Engineering, Inc.
Work Order: 14051473
Client Project: IDOT2013-080
Report Date: 05-Jun-14

This reporting package includes the following:

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Abbr Definition

CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.
DNI	Did not ignite
DUP	Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MB	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TNTC	Too numerous to count (> 200 CFU)

Qualifiers

# -	Unknown hydrocarbon	B -	Analyte detected in associated Method Blank
E -	Value above quantitation range	H -	Holding times exceeded
J -	Analyte detected below quantitation limits	M -	Manual Integration used to determine area response
ND -	Not Detected at the Reporting Limit	R -	RPD outside accepted recovery limits
S -	Spike Recovery outside recovery limits	X -	Value exceeds Maximum Contaminant Level

Case Narrative

http://www.teklabinc.com/

Client: Andrews Engineering, Inc.
Work Order: 14051473
Client Project: IDOT2013-080
Report Date: 05-Jun-14

Cooler Receipt Temp: 4.8 °C

Locations and Accreditations

	Collinsville	Springfield	Kansas City	Collinsville Air
Address	5445 Horseshoe Lake Road	3920 Pintail Dr	8421 Nieman Road	5445 Horseshoe Lake Road
	Collinsville, IL 62234-7425	Springfield, IL 62711-9415	Lenexa, KS 66214	Collinsville, IL 62234-7425
Phone	(618) 344-1004	(217) 698-1004	(913) 541-1998	(618) 344-1004
Fax	(618) 344-1005	(217) 698-1005	(913) 541-1998	(618) 344-1005
Email	jhriley@teklabinc.com	KKlostermann@teklabinc.com	dthompson@teklabinc.com	EHurley@teklabinc.com

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2015	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2015	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2014	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2014	Collinsville
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2014	Collinsville
Arkansas	ADEQ	88-0966		3/14/2015	Collinsville
Illinois	IDPH	17584		5/31/2015	Collinsville
Kentucky	UST	0073		1/31/2015	Collinsville
Missouri	MDNR	00930		5/31/2015	Collinsville
Oklahoma	ODEQ	9978		8/31/2014	Collinsville

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-005 **Client Sample ID:** 2045-5-B12

Matrix: SOLID **Collection Date:** 05/27/2014 9:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		**4.8**	%	1	05/29/2014 10:56	R191305
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		**95.2**	%	1	05/29/2014 10:56	R191305
SW-846 9045C									
pH (1:1)	NELAP	0	1		**8.49**		1	05/30/2014 16:13	R191357
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		**< 0.05**	mg/L	1	05/30/2014 13:58	99225
Beryllium	NELAP	0.0003	0.001		**< 0.001**	mg/L	1	05/30/2014 13:58	99225
Boron	NELAP	1	2		**< 2**	mg/L	1	05/30/2014 13:58	99225
Cadmium	NELAP	0.0003	0.002		**< 0.002**	mg/L	1	05/30/2014 13:58	99225
Chromium	NELAP	0.004	0.01		**< 0.01**	mg/L	1	05/30/2014 13:58	99225
Cobalt	NELAP	0.0022	0.01	J	**0.0022**	mg/L	1	05/30/2014 13:58	99225
Iron	NELAP	0.007	0.02		**4.24**	mg/L	1	05/30/2014 13:58	99225
Lead	NELAP	0.006	0.007		**< 0.007**	mg/L	1	05/30/2014 13:58	99225
Manganese	NELAP	0.0016	0.005		**0.0389**	mg/L	1	05/30/2014 13:58	99225
Nickel	NELAP	0.0033	0.01		**< 0.01**	mg/L	1	05/30/2014 13:58	99225
Selenium	NELAP	0.022	0.05		**< 0.05**	mg/L	1	05/30/2014 13:58	99225
Silver	NELAP	0.003	0.01		**< 0.01**	mg/L	1	05/30/2014 13:58	99225
Zinc	NELAP	0.0021	0.01		**0.0203**	mg/L	1	05/30/2014 13:58	99225
SW-846 1312, 3020A, 7010 METALS IN SPLP EXTRACT BY GFAA									
Antimony, SPLP by GFAA	NELAP	0.0017	0.005		**< 0.005**	mg/L	1	05/30/2014 13:59	99226
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		**< 0.002**	mg/L	1	05/30/2014 13:11	99226
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		**< 0.0002**	mg/L	1	05/30/2014 14:27	99228
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.36	4.55		**< 4.55**	mg/Kg-dry	1	05/31/2014 2:51	99209
Arsenic	NELAP	1.23	2.45	J	**2.4**	mg/Kg-dry	1	05/30/2014 17:36	99207
Barium	NELAP	0.25	0.49		**5.92**	mg/Kg-dry	1	05/30/2014 17:36	99207
Beryllium	NELAP	0.05	0.1		**0.14**	mg/Kg-dry	1	05/30/2014 17:36	99207
Boron	NELAP	0.98	1.96		**3.86**	mg/Kg-dry	1	05/30/2014 17:36	99207
Cadmium	NELAP	0.1	0.2		**< 0.2**	mg/Kg-dry	1	05/30/2014 17:36	99207
Calcium	NELAP	2.45	4.9		**52300**	mg/Kg-dry	1	05/30/2014 17:36	99207
Chromium	NELAP	0.49	0.98		**4.23**	mg/Kg-dry	1	05/30/2014 17:36	99207
Cobalt	NELAP	0.49	0.98		**2.7**	mg/Kg-dry	1	05/30/2014 17:36	99207
Copper	NELAP	0.49	0.98		**3.56**	mg/Kg-dry	1	05/30/2014 17:36	99207
Iron	NELAP	0.98	1.96		**6220**	mg/Kg-dry	1	05/30/2014 17:36	99207
Lead	NELAP	1.96	3.92	J	**3.28**	mg/Kg-dry	1	05/30/2014 17:36	99207
Magnesium	NELAP	0.49	0.98		**22900**	mg/Kg-dry	1	05/30/2014 17:36	99207
Manganese	NELAP	0.25	0.49		**214**	mg/Kg-dry	1	05/30/2014 17:36	99207
Nickel	NELAP	0.49	0.98		**5.06**	mg/Kg-dry	1	05/30/2014 17:36	99207
Potassium	NELAP	4.9	9.8		**498**	mg/Kg-dry	1	05/30/2014 17:36	99207
Silver	NELAP	0.49	0.54		**< 0.54**	mg/Kg-dry	1	05/30/2014 17:36	99207
Sodium	NELAP	2.45	4.9		**608**	mg/Kg-dry	1	05/30/2014 17:36	99207
Thallium	NELAP	2.45	2.55		**< 2.55**	mg/Kg-dry	1	05/30/2014 17:36	99207
Vanadium	NELAP	0.49	0.98		**7.42**	mg/Kg-dry	1	05/30/2014 17:36	99207
Zinc	NELAP	0.49	0.98		**17.5**	mg/Kg-dry	1	05/30/2014 17:36	99207

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-005 **Client Sample ID:** 2045-5-B12

Matrix: SOLID **Collection Date:** 05/27/2014 9:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.33	0.566		**< 0.566**	mg/Kg-dry	1	06/03/2014 9:24	99285
SW-846 7471B									
Mercury	NELAP	0.003	0.011	J	**0.007**	mg/Kg-dry	1	06/03/2014 11:59	99308
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.139	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
1,2-Dichlorobenzene	NELAP	0.167	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
1,3-Dichlorobenzene	NELAP	0.176	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
1,4-Dichlorobenzene	NELAP	0.167	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
2,4,5-Trichlorophenol	NELAP	0.1	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
2,4,6-Trichlorophenol	NELAP	0.132	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
2,4-Dichlorophenol	NELAP	0.127	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
2,4-Dimethylphenol	NELAP	0.133	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
2,4-Dinitrophenol	NELAP	0.112	1.05		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
2,4-Dinitrotoluene	NELAP	0.109	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
2,6-Dinitrotoluene	NELAP	0.113	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
2-Chloronaphthalene	NELAP	0.126	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
2-Chlorophenol	NELAP	0.133	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
2-Methylnaphthalene	NELAP	0.125	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
2-Nitroaniline	NELAP	0.095	1.05		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
2-Nitrophenol	NELAP	0.117	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
3,3´-Dichlorobenzidine	NELAP	0.21	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
3-Nitroaniline	NELAP	0.086	1.05		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
4,6-Dinitro-2-methylphenol	NELAP	0.113	1.05		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
4-Bromophenyl phenyl ether	NELAP	0.096	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
4-Chloro-3-methylphenol	NELAP	0.115	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
4-Chloroaniline	NELAP	0.127	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
4-Chlorophenyl phenyl ether	NELAP	0.104	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
4-Nitroaniline	NELAP	0.095	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
4-Nitrophenol	NELAP	0.103	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Acenaphthene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Acenaphthylene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Anthracene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Benzo(a)anthracene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Benzo(a)pyrene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Benzo(b)fluoranthene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Benzo(g,h,i)perylene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Benzo(k)fluoranthene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Bis(2-chloroethoxy)methane	NELAP	0.123	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Bis(2-chloroethyl)ether	NELAP	0.149	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Bis(2-chloroisopropyl)ether	NELAP	0.119	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Bis(2-ethylhexyl)phthalate	NELAP	0.123	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Butyl benzyl phthalate	NELAP	0.106	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Carbazole		0.128	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Chrysene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Dibenzo(a,h)anthracene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Dibenzofuran	NELAP	0.132	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Diethyl phthalate	NELAP	0.101	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-005 **Client Sample ID:** 2045-5-B12

Matrix: SOLID **Collection Date:** 05/27/2014 9:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Dimethyl phthalate	NELAP	0.095	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Di-n-butyl phthalate	NELAP	0.108	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Di-n-octyl phthalate	NELAP	0.109	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Fluoranthene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Fluorene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Hexachlorobenzene	NELAP	0.103	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Hexachlorobutadiene	NELAP	0.162	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Hexachlorocyclopentadiene	NELAP	0.107	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Hexachloroethane	NELAP	0.175	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Indeno(1,2,3-cd)pyrene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Isophorone	NELAP	0.124	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
m,p-Cresol	NELAP	0.132	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Naphthalene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Nitrobenzene	NELAP	0.131	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
N-Nitroso-di-n-propylamine	NELAP	0.115	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
N-Nitrosodiphenylamine	NELAP	0.096	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
o-Cresol	NELAP	0.124	0.524		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Pentachlorophenol	NELAP	0.691	2.1		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Phenanthrene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Phenol	NELAP	0.122	0.367		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Pyrene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/03/2014 23:47	99321
Surr: 2,4,6-Tribromophenol		0	33.7-105		**87.1**	%REC	1	06/03/2014 23:47	99321
Surr: 2-Fluorobiphenyl		0	24.2-75.3		**66.4**	%REC	1	06/03/2014 23:47	99321
Surr: 2-Fluorophenol		0	43-85.2		**66.2**	%REC	1	06/03/2014 23:47	99321
Surr: Nitrobenzene-d5		0	35.5-60.5		**58.1**	%REC	1	06/03/2014 23:47	99321
Surr: Phenol-d5		0	48.9-86.9		**72.3**	%REC	1	06/03/2014 23:47	99321
Surr: p-Terphenyl-d14		0	40.2-101		**87.4**	%REC	1	06/03/2014 23:47	99321
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
1,1,2,2-Tetrachloroethane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
1,1,2-Trichloroethane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
1,1-Dichloroethane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
1,1-Dichloroethene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
1,2-Dichloroethane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
1,2-Dichloropropane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
1,3-Dichloropropene, Total		0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
2-Butanone	NELAP	0.0093	0.047		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
2-Hexanone	NELAP	0.0093	0.047		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
4-Methyl-2-pentanone	NELAP	0.0093	0.047		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Acetone	NELAP	0.0093	0.047	J	**0.017**	mg/Kg-dry	1	05/29/2014 1:02	99204
Benzene	NELAP	0.0005	0.001		**0.003**	mg/Kg-dry	1	05/29/2014 1:02	99204
Bromodichloromethane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Bromoform	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Bromomethane	NELAP	0.0019	0.009		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Carbon disulfide	NELAP	0.0028	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Carbon tetrachloride	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Chlorobenzene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-005 **Client Sample ID:** 2045-5-B12

Matrix: SOLID **Collection Date:** 05/27/2014 9:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0019	0.009		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Chloroform	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Chloromethane	NELAP	0.0019	0.009		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
cis-1,2-Dichloroethene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
cis-1,3-Dichloropropene	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Dibromochloromethane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Ethylbenzene	NELAP	0.0009	0.005	J	**0.001**	mg/Kg-dry	1	05/29/2014 1:02	99204
m,p-Xylenes	NELAP	0.0009	0.005	J	**0.002**	mg/Kg-dry	1	05/29/2014 1:02	99204
Methyl tert-butyl ether	NELAP	0.0005	0.002		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Methylene chloride	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
o-Xylene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Styrene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Tetrachloroethene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Toluene	NELAP	0.0009	0.005		**0.005**	mg/Kg-dry	1	05/29/2014 1:02	99204
trans-1,2-Dichloroethene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
trans-1,3-Dichloropropene	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Trichloroethene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Vinyl acetate	NELAP	0.0186	0.047		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Vinyl chloride	NELAP	0.0005	0.002		**ND**	mg/Kg-dry	1	05/29/2014 1:02	99204
Xylenes, Total	NELAP	0.0009	0.005	J	**0.002**	mg/Kg-dry	1	05/29/2014 1:02	99204
Surr: 1,2-Dichloroethane-d4		0	72.2-131		**118.1**	%REC	1	05/29/2014 1:02	99204
Surr: 4-Bromofluorobenzene		0	82.1-116		**112.3**	%REC	1	05/29/2014 1:02	99204
Surr: Dibromofluoromethane		0	77.7-120		**108.3**	%REC	1	05/29/2014 1:02	99204
Surr: Toluene-d8		0	86-116		**99.7**	%REC	1	05/29/2014 1:02	99204

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-006 **Client Sample ID:** 2045-5-B13-1

Matrix: SOLID **Collection Date:** 05/27/2014 9:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		**5.1**	%	1	05/29/2014 10:57	R191305
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		**94.9**	%	1	05/29/2014 10:57	R191305
SW-846 9045C									
pH (1:1)	NELAP	0	1		**8.33**		1	05/30/2014 16:14	R191357
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		**< 0.05**	mg/L	1	05/30/2014 14:02	99225
Beryllium	NELAP	0.0003	0.001		**< 0.001**	mg/L	1	05/30/2014 14:02	99225
Boron	NELAP	1	2		**< 2**	mg/L	1	05/30/2014 14:02	99225
Cadmium	NELAP	0.0003	0.002		**< 0.002**	mg/L	1	05/30/2014 14:02	99225
Chromium	NELAP	0.004	0.01		**< 0.01**	mg/L	1	05/30/2014 14:02	99225
Cobalt	NELAP	0.0022	0.01		**< 0.01**	mg/L	1	05/30/2014 14:02	99225
Iron	NELAP	0.007	0.02		**2.19**	mg/L	1	05/30/2014 14:02	99225
Lead	NELAP	0.006	0.007		**< 0.007**	mg/L	1	05/30/2014 14:02	99225
Manganese	NELAP	0.0016	0.005		**0.0198**	mg/L	1	05/30/2014 14:02	99225
Nickel	NELAP	0.0033	0.01		**< 0.01**	mg/L	1	05/30/2014 14:02	99225
Selenium	NELAP	0.022	0.05		**< 0.05**	mg/L	1	05/30/2014 14:02	99225
Silver	NELAP	0.003	0.01		**< 0.01**	mg/L	1	05/30/2014 14:02	99225
Zinc	NELAP	0.0021	0.01		**0.0134**	mg/L	1	05/30/2014 14:02	99225
SW-846 1312, 3020A, 7010 METALS IN SPLP EXTRACT BY GFAA									
Antimony, SPLP by GFAA	NELAP	0.0017	0.005		**< 0.005**	mg/L	1	05/30/2014 14:03	99226
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		**< 0.002**	mg/L	1	05/30/2014 13:15	99226
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		**< 0.0002**	mg/L	1	05/30/2014 14:34	99228
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		**< 5**	mg/Kg-dry	1	05/31/2014 3:10	99209
Arsenic	NELAP	1.16	2.31		**2.81**	mg/Kg-dry	1	05/30/2014 17:39	99207
Barium	NELAP	0.23	0.46		**7.04**	mg/Kg-dry	1	05/30/2014 17:39	99207
Beryllium	NELAP	0.05	0.09		**0.15**	mg/Kg-dry	1	05/30/2014 17:39	99207
Boron	NELAP	0.93	1.85		**4.2**	mg/Kg-dry	1	05/30/2014 17:39	99207
Cadmium	NELAP	0.09	0.19		**< 0.19**	mg/Kg-dry	1	05/30/2014 17:39	99207
Calcium	NELAP	2.31	4.63		**59100**	mg/Kg-dry	1	05/30/2014 17:39	99207
Chromium	NELAP	0.46	0.93		**4.81**	mg/Kg-dry	1	05/30/2014 17:39	99207
Cobalt	NELAP	0.46	0.93		**3.09**	mg/Kg-dry	1	05/30/2014 17:39	99207
Copper	NELAP	0.46	0.93		**3.41**	mg/Kg-dry	1	05/30/2014 17:39	99207
Iron	NELAP	0.93	1.85		**5930**	mg/Kg-dry	1	05/30/2014 17:39	99207
Lead	NELAP	1.85	3.7	J	**3.24**	mg/Kg-dry	1	05/30/2014 17:39	99207
Magnesium	NELAP	0.46	0.93		**27000**	mg/Kg-dry	1	05/30/2014 17:39	99207
Manganese	NELAP	0.23	0.46		**251**	mg/Kg-dry	1	05/30/2014 17:39	99207
Nickel	NELAP	0.46	0.93		**5.65**	mg/Kg-dry	1	05/30/2014 17:39	99207
Potassium	NELAP	4.63	9.26		**557**	mg/Kg-dry	1	05/30/2014 17:39	99207
Silver	NELAP	0.46	0.51		**< 0.51**	mg/Kg-dry	1	05/30/2014 17:39	99207
Sodium	NELAP	2.31	4.63		**437**	mg/Kg-dry	1	05/30/2014 17:39	99207
Thallium	NELAP	2.31	2.41		**< 2.41**	mg/Kg-dry	1	05/30/2014 17:39	99207
Vanadium	NELAP	0.46	0.93		**9.58**	mg/Kg-dry	1	05/30/2014 17:39	99207
Zinc	NELAP	0.46	0.93		**18.2**	mg/Kg-dry	1	05/30/2014 17:39	99207

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-006 **Client Sample ID:** 2045-5-B13-1

Matrix: SOLID **Collection Date:** 05/27/2014 9:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.33	0.566		**< 0.566**	mg/Kg-dry	1	06/03/2014 9:28	99285
SW-846 7471B									
Mercury	NELAP	0.003	0.01	J	**0.007**	mg/Kg-dry	1	06/03/2014 12:01	99308
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.139	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
1,2-Dichlorobenzene	NELAP	0.166	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
1,3-Dichlorobenzene	NELAP	0.176	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
1,4-Dichlorobenzene	NELAP	0.166	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
2,4,5-Trichlorophenol	NELAP	0.099	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
2,4,6-Trichlorophenol	NELAP	0.132	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
2,4-Dichlorophenol	NELAP	0.126	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
2,4-Dimethylphenol	NELAP	0.133	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
2,4-Dinitrophenol	NELAP	0.112	1.04		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
2,4-Dinitrotoluene	NELAP	0.109	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
2,6-Dinitrotoluene	NELAP	0.113	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
2-Chloronaphthalene	NELAP	0.125	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
2-Chlorophenol	NELAP	0.133	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
2-Methylnaphthalene	NELAP	0.124	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
2-Nitroaniline	NELAP	0.095	1.04		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
2-Nitrophenol	NELAP	0.117	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
3,3´-Dichlorobenzidine	NELAP	0.209	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
3-Nitroaniline	NELAP	0.086	1.04		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
4,6-Dinitro-2-methylphenol	NELAP	0.113	1.04		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
4-Bromophenyl phenyl ether	NELAP	0.096	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
4-Chloro-3-methylphenol	NELAP	0.115	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
4-Chloroaniline	NELAP	0.126	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
4-Chlorophenyl phenyl ether	NELAP	0.103	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
4-Nitroaniline	NELAP	0.095	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
4-Nitrophenol	NELAP	0.102	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Acenaphthene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Acenaphthylene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Anthracene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Benzo(a)anthracene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Benzo(a)pyrene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Benzo(b)fluoranthene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Benzo(g,h,i)perylene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Benzo(k)fluoranthene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Bis(2-chloroethoxy)methane	NELAP	0.122	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Bis(2-chloroethyl)ether	NELAP	0.148	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Bis(2-chloroisopropyl)ether	NELAP	0.119	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Bis(2-ethylhexyl)phthalate	NELAP	0.122	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Butyl benzyl phthalate	NELAP	0.106	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Carbazole		0.127	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Chrysene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Dibenzo(a,h)anthracene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Dibenzofuran	NELAP	0.132	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Diethyl phthalate	NELAP	0.1	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-006 **Client Sample ID:** 2045-5-B13-1

Matrix: SOLID **Collection Date:** 05/27/2014 9:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Dimethyl phthalate	NELAP	0.095	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Di-n-butyl phthalate	NELAP	0.108	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Di-n-octyl phthalate	NELAP	0.109	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Fluoranthene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Fluorene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Hexachlorobenzene	NELAP	0.102	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Hexachlorobutadiene	NELAP	0.162	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Hexachlorocyclopentadiene	NELAP	0.107	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Hexachloroethane	NELAP	0.174	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Indeno(1,2,3-cd)pyrene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Isophorone	NELAP	0.123	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
m,p-Cresol	NELAP	0.132	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Naphthalene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Nitrobenzene	NELAP	0.131	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
N-Nitroso-di-n-propylamine	NELAP	0.115	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
N-Nitrosodiphenylamine	NELAP	0.096	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
o-Cresol	NELAP	0.123	0.522		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Pentachlorophenol	NELAP	0.689	2.09		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Phenanthrene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Phenol	NELAP	0.121	0.366		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Pyrene	NELAP	0.017	0.036		**ND**	mg/Kg-dry	1	06/04/2014 0:21	99321
Surr: 2,4,6-Tribromophenol		0	33.7-105		**88**	%REC	1	06/04/2014 0:21	99321
Surr: 2-Fluorobiphenyl		0	24.2-75.3		**71.3**	%REC	1	06/04/2014 0:21	99321
Surr: 2-Fluorophenol		0	43-85.2		**72.9**	%REC	1	06/04/2014 0:21	99321
Surr: Nitrobenzene-d5		0	35.5-60.5	S	**62.2**	%REC	1	06/04/2014 0:21	99321
Surr: Phenol-d5		0	48.9-86.9		**78.3**	%REC	1	06/04/2014 0:21	99321
Surr: p-Terphenyl-d14		0	40.2-101		**87.4**	%REC	1	06/04/2014 0:21	99321
Surrogate recovery is outside QC limits due to matrix interference.									
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
1,1,2-Trichloroethane	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
1,1-Dichloroethane	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
1,1-Dichloroethene	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
1,2-Dichloroethane	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
1,2-Dichloropropane	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
1,3-Dichloropropene, Total		0.0008	0.003		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
2-Butanone	NELAP	0.008	0.04		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
2-Hexanone	NELAP	0.008	0.04		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
4-Methyl-2-pentanone	NELAP	0.008	0.04		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Acetone	NELAP	0.008	0.04	J	**0.011**	mg/Kg-dry	1	05/29/2014 1:29	99204
Benzene	NELAP	0.0004	0.001		**0.002**	mg/Kg-dry	1	05/29/2014 1:29	99204
Bromodichloromethane	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Bromoform	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Bromomethane	NELAP	0.0016	0.008		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Carbon disulfide	NELAP	0.0024	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Carbon tetrachloride	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-006 **Client Sample ID:** 2045-5-B13-1

Matrix: SOLID **Collection Date:** 05/27/2014 9:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chlorobenzene	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Chloroethane	NELAP	0.0016	0.008		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Chloroform	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Chloromethane	NELAP	0.0016	0.008		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Dibromochloromethane	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Ethylbenzene	NELAP	0.0008	0.004	J	**0.001**	mg/Kg-dry	1	05/29/2014 1:29	99204
m,p-Xylenes	NELAP	0.0008	0.004	J	**0.001**	mg/Kg-dry	1	05/29/2014 1:29	99204
Methyl tert-butyl ether	NELAP	0.0004	0.002		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Methylene chloride	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
o-Xylene	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Styrene	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Tetrachloroethene	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Toluene	NELAP	0.0008	0.004	J	**0.003**	mg/Kg-dry	1	05/29/2014 1:29	99204
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Trichloroethene	NELAP	0.0008	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Vinyl acetate	NELAP	0.0161	0.04		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Vinyl chloride	NELAP	0.0004	0.002		**ND**	mg/Kg-dry	1	05/29/2014 1:29	99204
Xylenes, Total	NELAP	0.0008	0.004	J	**0.001**	mg/Kg-dry	1	05/29/2014 1:29	99204
Surr: 1,2-Dichloroethane-d4		0	72.2-131		**114.3**	%REC	1	05/29/2014 1:29	99204
Surr: 4-Bromofluorobenzene		0	82.1-116		**112.6**	%REC	1	05/29/2014 1:29	99204
Surr: Dibromofluoromethane		0	77.7-120		**107.2**	%REC	1	05/29/2014 1:29	99204
Surr: Toluene-d8		0	86-116		**98.5**	%REC	1	05/29/2014 1:29	99204

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-007 **Client Sample ID:** 2045-5-B13-2

Matrix: SOLID **Collection Date:** 05/27/2014 9:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		**20.4**	%	1	05/29/2014 10:57	R191305
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		**79.6**	%	1	05/29/2014 10:57	R191305
SW-846 9045C									
pH (1:1)	NELAP	0	1		**8.47**		1	05/30/2014 16:15	R191357
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		**< 0.05**	mg/L	1	05/30/2014 14:06	99225
Beryllium	NELAP	0.0003	0.001		**< 0.001**	mg/L	1	05/30/2014 14:06	99225
Boron	NELAP	1	2		**< 2**	mg/L	1	05/30/2014 14:06	99225
Cadmium	NELAP	0.0003	0.002		**< 0.002**	mg/L	1	05/30/2014 14:06	99225
Chromium	NELAP	0.004	0.01		**< 0.01**	mg/L	1	05/30/2014 14:06	99225
Cobalt	NELAP	0.0022	0.01		**< 0.01**	mg/L	1	05/30/2014 14:06	99225
Iron	NELAP	0.007	0.02		**0.771**	mg/L	1	05/30/2014 14:06	99225
Lead	NELAP	0.006	0.007		**< 0.007**	mg/L	1	05/30/2014 14:06	99225
Manganese	NELAP	0.0016	0.005		**0.0086**	mg/L	1	05/30/2014 14:06	99225
Nickel	NELAP	0.0033	0.01		**< 0.01**	mg/L	1	05/30/2014 14:06	99225
Selenium	NELAP	0.022	0.05		**< 0.05**	mg/L	1	05/30/2014 14:06	99225
Silver	NELAP	0.003	0.01		**< 0.01**	mg/L	1	05/30/2014 14:06	99225
Zinc	NELAP	0.0021	0.01	J	**0.0046**	mg/L	1	05/30/2014 14:06	99225
SW-846 1312, 3020A, 7010 METALS IN SPLP EXTRACT BY GFAA									
Antimony, SPLP by GFAA	NELAP	0.0017	0.005		**< 0.005**	mg/L	1	05/30/2014 14:06	99226
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		**< 0.002**	mg/L	1	05/30/2014 13:18	99226
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		**< 0.0002**	mg/L	1	05/30/2014 14:36	99228
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.45	4.72		**< 4.72**	mg/Kg-dry	1	05/31/2014 3:16	99209
Arsenic	NELAP	1.18	2.36		**3.42**	mg/Kg-dry	1	05/30/2014 17:43	99207
Barium	NELAP	0.24	0.47		**10.2**	mg/Kg-dry	1	05/30/2014 17:43	99207
Beryllium	NELAP	0.05	0.09		**0.21**	mg/Kg-dry	1	05/30/2014 17:43	99207
Boron	NELAP	0.94	1.89		**6.68**	mg/Kg-dry	1	05/30/2014 17:43	99207
Cadmium	NELAP	0.09	0.19		**< 0.19**	mg/Kg-dry	1	05/30/2014 17:43	99207
Calcium	NELAP	2.36	4.72		**90400**	mg/Kg-dry	1	05/30/2014 17:43	99207
Chromium	NELAP	0.47	0.94		**6.34**	mg/Kg-dry	1	05/30/2014 17:43	99207
Cobalt	NELAP	0.47	0.94		**4.28**	mg/Kg-dry	1	05/30/2014 17:43	99207
Copper	NELAP	0.47	0.94		**8.63**	mg/Kg-dry	1	05/30/2014 17:43	99207
Iron	NELAP	0.94	1.89		**10000**	mg/Kg-dry	1	05/30/2014 17:43	99207
Lead	NELAP	1.89	3.77		**4.64**	mg/Kg-dry	1	05/30/2014 17:43	99207
Magnesium	NELAP	0.47	0.94		**43800**	mg/Kg-dry	1	05/30/2014 17:43	99207
Manganese	NELAP	0.24	0.47		**447**	mg/Kg-dry	1	05/30/2014 17:43	99207
Nickel	NELAP	0.47	0.94		**8.08**	mg/Kg-dry	1	05/30/2014 17:43	99207
Potassium	NELAP	4.72	9.43		**909**	mg/Kg-dry	1	05/30/2014 17:43	99207
Silver	NELAP	0.47	0.52		**< 0.52**	mg/Kg-dry	1	05/30/2014 17:43	99207
Sodium	NELAP	2.36	4.72		**854**	mg/Kg-dry	1	05/30/2014 17:43	99207
Thallium	NELAP	2.36	2.45		**< 2.45**	mg/Kg-dry	1	05/30/2014 17:43	99207
Vanadium	NELAP	0.47	0.94		**11.9**	mg/Kg-dry	1	05/30/2014 17:43	99207
Zinc	NELAP	0.47	0.94		**30.9**	mg/Kg-dry	1	05/30/2014 17:43	99207

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-007 **Client Sample ID:** 2045-5-B13-2

Matrix: SOLID **Collection Date:** 05/27/2014 9:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.337	0.577		**< 0.577**	mg/Kg-dry	1	06/03/2014 9:31	99285
SW-846 7471B									
Mercury	NELAP	0.003	0.012	J	**0.007**	mg/Kg-dry	1	06/03/2014 12:03	99308
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.166	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
1,2-Dichlorobenzene	NELAP	0.198	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
1,3-Dichlorobenzene	NELAP	0.21	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
1,4-Dichlorobenzene	NELAP	0.198	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
2,4,5-Trichlorophenol	NELAP	0.119	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
2,4,6-Trichlorophenol	NELAP	0.157	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
2,4-Dichlorophenol	NELAP	0.151	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
2,4-Dimethylphenol	NELAP	0.159	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
2,4-Dinitrophenol	NELAP	0.134	1.25		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
2,4-Dinitrotoluene	NELAP	0.13	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
2,6-Dinitrotoluene	NELAP	0.135	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
2-Chloronaphthalene	NELAP	0.15	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
2-Chlorophenol	NELAP	0.159	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
2-Methylnaphthalene	NELAP	0.149	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
2-Nitroaniline	NELAP	0.114	1.25		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
2-Nitrophenol	NELAP	0.14	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
3,3´-Dichlorobenzidine	NELAP	0.25	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
3-Nitroaniline	NELAP	0.102	1.25		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
4,6-Dinitro-2-methylphenol	NELAP	0.135	1.25		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
4-Bromophenyl phenyl ether	NELAP	0.115	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
4-Chloro-3-methylphenol	NELAP	0.137	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
4-Chloroaniline	NELAP	0.151	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
4-Chlorophenyl phenyl ether	NELAP	0.124	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
4-Nitroaniline	NELAP	0.114	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
4-Nitrophenol	NELAP	0.122	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Acenaphthene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Acenaphthylene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Anthracene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Benzo(a)anthracene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Benzo(a)pyrene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Benzo(b)fluoranthene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Benzo(g,h,i)perylene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Benzo(k)fluoranthene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Bis(2-chloroethoxy)methane	NELAP	0.146	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Bis(2-chloroethyl)ether	NELAP	0.177	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Bis(2-chloroisopropyl)ether	NELAP	0.142	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Bis(2-ethylhexyl)phthalate	NELAP	0.146	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Butyl benzyl phthalate	NELAP	0.126	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Carbazole		0.152	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Chrysene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Dibenzo(a,h)anthracene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Dibenzofuran	NELAP	0.157	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Diethyl phthalate	NELAP	0.12	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-007 **Client Sample ID:** 2045-5-B13-2

Matrix: SOLID **Collection Date:** 05/27/2014 9:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Dimethyl phthalate	NELAP	0.114	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Di-n-butyl phthalate	NELAP	0.129	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Di-n-octyl phthalate	NELAP	0.13	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Fluoranthene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Fluorene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Hexachlorobenzene	NELAP	0.122	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Hexachlorobutadiene	NELAP	0.193	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Hexachlorocyclopentadiene	NELAP	0.127	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Hexachloroethane	NELAP	0.208	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Indeno(1,2,3-cd)pyrene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Isophorone	NELAP	0.147	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
m,p-Cresol	NELAP	0.157	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Naphthalene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Nitrobenzene	NELAP	0.156	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
N-Nitroso-di-n-propylamine	NELAP	0.137	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
N-Nitrosodiphenylamine	NELAP	0.115	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
o-Cresol	NELAP	0.147	0.624		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Pentachlorophenol	NELAP	0.824	2.5		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Phenanthrene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Phenol	NELAP	0.145	0.437		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Pyrene	NELAP	0.021	0.042		**ND**	mg/Kg-dry	1	06/04/2014 0:56	99321
Surr: 2,4,6-Tribromophenol		0	33.7-105		**80.9**	%REC	1	06/04/2014 0:56	99321
Surr: 2-Fluorobiphenyl		0	24.2-75.3		**66.4**	%REC	1	06/04/2014 0:56	99321
Surr: 2-Fluorophenol		0	43-85.2		**70**	%REC	1	06/04/2014 0:56	99321
Surr: Nitrobenzene-d5		0	35.5-60.5		**59**	%REC	1	06/04/2014 0:56	99321
Surr: Phenol-d5		0	48.9-86.9		**74.7**	%REC	1	06/04/2014 0:56	99321
Surr: p-Terphenyl-d14		0	40.2-101		**82.7**	%REC	1	06/04/2014 0:56	99321
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
1,1,2,2-Tetrachloroethane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
1,1,2-Trichloroethane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
1,1-Dichloroethane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
1,1-Dichloroethene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
1,2-Dichloroethane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
1,2-Dichloropropane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
1,3-Dichloropropene, Total		0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
2-Butanone	NELAP	0.0091	0.046		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
2-Hexanone	NELAP	0.0091	0.046		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
4-Methyl-2-pentanone	NELAP	0.0091	0.046		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Acetone	NELAP	0.0091	0.046	J	**0.014**	mg/Kg-dry	1	05/29/2014 1:55	99204
Benzene	NELAP	0.0005	0.001		**0.001**	mg/Kg-dry	1	05/29/2014 1:55	99204
Bromodichloromethane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Bromoform	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Bromomethane	NELAP	0.0018	0.009		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Carbon disulfide	NELAP	0.0027	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Carbon tetrachloride	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Chlorobenzene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-007 **Client Sample ID:** 2045-5-B13-2

Matrix: SOLID **Collection Date:** 05/27/2014 9:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0018	0.009		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Chloroform	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Chloromethane	NELAP	0.0018	0.009		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
cis-1,2-Dichloroethene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
cis-1,3-Dichloropropene	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Dibromochloromethane	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Ethylbenzene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
m,p-Xylenes	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Methyl tert-butyl ether	NELAP	0.0005	0.002		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Methylene chloride	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
o-Xylene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Styrene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Tetrachloroethene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Toluene	NELAP	0.0009	0.005	J	**0.002**	mg/Kg-dry	1	05/29/2014 1:55	99204
trans-1,2-Dichloroethene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
trans-1,3-Dichloropropene	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Trichloroethene	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Vinyl acetate	NELAP	0.0182	0.046		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Vinyl chloride	NELAP	0.0005	0.002		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Xylenes, Total	NELAP	0.0009	0.005		**ND**	mg/Kg-dry	1	05/29/2014 1:55	99204
Surr: 1,2-Dichloroethane-d4		0	72.2-131		**115.5**	%REC	1	05/29/2014 1:55	99204
Surr: 4-Bromofluorobenzene		0	82.1-116		**114.1**	%REC	1	05/29/2014 1:55	99204
Surr: Dibromofluoromethane		0	77.7-120		**106.9**	%REC	1	05/29/2014 1:55	99204
Surr: Toluene-d8		0	86-116		**103.3**	%REC	1	05/29/2014 1:55	99204

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-008 **Client Sample ID:** 2045-5-B13-3

Matrix: SOLID **Collection Date:** 05/27/2014 9:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		**18.1**	%	1	05/29/2014 10:57	R191305
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		**81.9**	%	1	05/29/2014 10:57	R191305
SW-846 9045C									
pH (1:1)	NELAP	0	1		**8**		1	05/30/2014 16:19	R191357
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		**< 0.05**	mg/L	1	05/30/2014 14:09	99225
Beryllium	NELAP	0.0003	0.001		**< 0.001**	mg/L	1	05/30/2014 14:09	99225
Boron	NELAP	1	2		**< 2**	mg/L	1	05/30/2014 14:09	99225
Cadmium	NELAP	0.0003	0.002		**< 0.002**	mg/L	1	05/30/2014 14:09	99225
Chromium	NELAP	0.004	0.01		**< 0.01**	mg/L	1	05/30/2014 14:09	99225
Cobalt	NELAP	0.0022	0.01		**< 0.01**	mg/L	1	05/30/2014 14:09	99225
Iron	NELAP	0.007	0.02		**0.591**	mg/L	1	05/30/2014 14:09	99225
Lead	NELAP	0.006	0.007		**< 0.007**	mg/L	1	05/30/2014 14:09	99225
Manganese	NELAP	0.0016	0.005	J	**0.0041**	mg/L	1	05/30/2014 14:09	99225
Nickel	NELAP	0.0033	0.01		**< 0.01**	mg/L	1	05/30/2014 14:09	99225
Selenium	NELAP	0.022	0.05		**< 0.05**	mg/L	1	05/30/2014 14:09	99225
Silver	NELAP	0.003	0.01		**< 0.01**	mg/L	1	05/30/2014 14:09	99225
Zinc	NELAP	0.0021	0.01	J	**0.0048**	mg/L	1	05/30/2014 14:09	99225
SW-846 1312, 3020A, 7010 METALS IN SPLP EXTRACT BY GFAA									
Antimony, SPLP by GFAA	NELAP	0.0017	0.005		**< 0.005**	mg/L	1	05/30/2014 14:10	99226
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		**< 0.002**	mg/L	1	05/30/2014 13:22	99226
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		**< 0.0002**	mg/L	1	05/30/2014 14:38	99228
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		**< 4.81**	mg/Kg-dry	1	05/31/2014 3:22	99209
Arsenic	NELAP	1.25	2.5		**3.42**	mg/Kg-dry	1	05/30/2014 17:47	99207
Barium	NELAP	0.25	0.5		**12.8**	mg/Kg-dry	1	05/30/2014 17:47	99207
Beryllium	NELAP	0.05	0.1		**0.2**	mg/Kg-dry	1	05/30/2014 17:47	99207
Boron	NELAP	1	2		**6.95**	mg/Kg-dry	1	05/30/2014 17:47	99207
Cadmium	NELAP	0.1	0.2		**< 0.2**	mg/Kg-dry	1	05/30/2014 17:47	99207
Calcium	NELAP	2.5	5		**97600**	mg/Kg-dry	1	05/30/2014 17:47	99207
Chromium	NELAP	0.5	1		**6.22**	mg/Kg-dry	1	05/30/2014 17:47	99207
Cobalt	NELAP	0.5	1		**3.65**	mg/Kg-dry	1	05/30/2014 17:47	99207
Copper	NELAP	0.5	1		**7.35**	mg/Kg-dry	1	05/30/2014 17:47	99207
Iron	NELAP	1	2		**8820**	mg/Kg-dry	1	05/30/2014 17:47	99207
Lead	NELAP	2	4		**4.15**	mg/Kg-dry	1	05/30/2014 17:47	99207
Magnesium	NELAP	0.5	1		**48000**	mg/Kg-dry	1	05/30/2014 17:47	99207
Manganese	NELAP	0.25	0.5		**520**	mg/Kg-dry	1	05/30/2014 17:47	99207
Nickel	NELAP	0.5	1		**7.21**	mg/Kg-dry	1	05/30/2014 17:47	99207
Potassium	NELAP	5	10		**889**	mg/Kg-dry	1	05/30/2014 17:47	99207
Silver	NELAP	0.5	0.55		**< 0.55**	mg/Kg-dry	1	05/30/2014 17:47	99207
Sodium	NELAP	2.5	5		**893**	mg/Kg-dry	1	05/30/2014 17:47	99207
Thallium	NELAP	2.5	2.6		**< 2.6**	mg/Kg-dry	1	05/30/2014 17:47	99207
Vanadium	NELAP	0.5	1		**10.9**	mg/Kg-dry	1	05/30/2014 17:47	99207
Zinc	NELAP	0.5	1		**20.6**	mg/Kg-dry	1	05/30/2014 17:47	99207

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-008 **Client Sample ID:** 2045-5-B13-3

Matrix: SOLID **Collection Date:** 05/27/2014 9:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588		**< 0.588**	mg/Kg-dry	1	06/03/2014 9:35	99285
SW-846 7471B									
Mercury	NELAP	0.003	0.012	J	**0.008**	mg/Kg-dry	1	06/03/2014 12:05	99308
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.162	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
1,2-Dichlorobenzene	NELAP	0.193	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
1,3-Dichlorobenzene	NELAP	0.204	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
1,4-Dichlorobenzene	NELAP	0.193	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
2,4,5-Trichlorophenol	NELAP	0.115	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
2,4,6-Trichlorophenol	NELAP	0.153	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
2,4-Dichlorophenol	NELAP	0.147	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
2,4-Dimethylphenol	NELAP	0.154	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
2,4-Dinitrophenol	NELAP	0.13	1.21		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
2,4-Dinitrotoluene	NELAP	0.126	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
2,6-Dinitrotoluene	NELAP	0.131	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
2-Chloronaphthalene	NELAP	0.146	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
2-Chlorophenol	NELAP	0.154	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
2-Methylnaphthalene	NELAP	0.145	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
2-Nitroaniline	NELAP	0.111	1.21		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
2-Nitrophenol	NELAP	0.136	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
3,3´-Dichlorobenzidine	NELAP	0.243	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
3-Nitroaniline	NELAP	0.1	1.21		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
4,6-Dinitro-2-methylphenol	NELAP	0.131	1.21		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
4-Bromophenyl phenyl ether	NELAP	0.112	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
4-Chloro-3-methylphenol	NELAP	0.134	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
4-Chloroaniline	NELAP	0.147	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
4-Chlorophenyl phenyl ether	NELAP	0.12	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
4-Nitroaniline	NELAP	0.111	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
4-Nitrophenol	NELAP	0.119	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Acenaphthene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Acenaphthylene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Anthracene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Benzo(a)anthracene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Benzo(a)pyrene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Benzo(b)fluoranthene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Benzo(g,h,i)perylene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Benzo(k)fluoranthene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Bis(2-chloroethoxy)methane	NELAP	0.142	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Bis(2-chloroethyl)ether	NELAP	0.172	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Bis(2-chloroisopropyl)ether	NELAP	0.138	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Bis(2-ethylhexyl)phthalate	NELAP	0.142	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Butyl benzyl phthalate	NELAP	0.123	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Carbazole		0.148	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Chrysene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Dibenzo(a,h)anthracene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Dibenzofuran	NELAP	0.153	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Diethyl phthalate	NELAP	0.117	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-008 **Client Sample ID:** 2045-5-B13-3

Matrix: SOLID **Collection Date:** 05/27/2014 9:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Dimethyl phthalate	NELAP	0.111	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Di-n-butyl phthalate	NELAP	0.125	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Di-n-octyl phthalate	NELAP	0.126	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Fluoranthene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Fluorene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Hexachlorobenzene	NELAP	0.119	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Hexachlorobutadiene	NELAP	0.188	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Hexachlorocyclopentadiene	NELAP	0.124	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Hexachloroethane	NELAP	0.203	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Isophorone	NELAP	0.143	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
m,p-Cresol	NELAP	0.153	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Naphthalene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Nitrobenzene	NELAP	0.152	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
N-Nitroso-di-n-propylamine	NELAP	0.134	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
N-Nitrosodiphenylamine	NELAP	0.112	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
o-Cresol	NELAP	0.143	0.607		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Pentachlorophenol	NELAP	0.802	2.43		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Phenanthrene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Phenol	NELAP	0.141	0.425		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Pyrene	NELAP	0.02	0.041		**ND**	mg/Kg-dry	1	06/04/2014 1:31	99321
Surr: 2,4,6-Tribromophenol		0	33.7-105		**83**	%REC	1	06/04/2014 1:31	99321
Surr: 2-Fluorobiphenyl		0	24.2-75.3		**69.1**	%REC	1	06/04/2014 1:31	99321
Surr: 2-Fluorophenol		0	43-85.2		**73.2**	%REC	1	06/04/2014 1:31	99321
Surr: Nitrobenzene-d5		0	35.5-60.5	S	**61.2**	%REC	1	06/04/2014 1:31	99321
Surr: Phenol-d5		0	48.9-86.9		**77.4**	%REC	1	06/04/2014 1:31	99321
Surr: p-Terphenyl-d14		0	40.2-101		**86.2**	%REC	1	06/04/2014 1:31	99321
Surrogate recovery is outside QC limits due to matrix interference.									
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
1,1,2,2-Tetrachloroethane	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
1,1,2-Trichloroethane	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
1,1-Dichloroethane	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
1,1-Dichloroethene	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
1,2-Dichloroethane	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
1,2-Dichloropropane	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
1,3-Dichloropropene, Total		0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
2-Butanone	NELAP	0.0088	0.044		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
2-Hexanone	NELAP	0.0088	0.044		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
4-Methyl-2-pentanone	NELAP	0.0088	0.044		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Acetone	NELAP	0.0088	0.044	J	**0.014**	mg/Kg-dry	1	05/29/2014 2:23	99204
Benzene	NELAP	0.0004	0.001		**0.001**	mg/Kg-dry	1	05/29/2014 2:23	99204
Bromodichloromethane	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Bromoform	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Bromomethane	NELAP	0.0018	0.009		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Carbon disulfide	NELAP	0.0026	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Carbon tetrachloride	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204

Client: Andrews Engineering, Inc. **Work Order:** 14051473

Client Project: IDOT2013-080 **Report Date:** 05-Jun-14

Lab ID: 14051473-008 **Client Sample ID:** 2045-5-B13-3

Matrix: SOLID **Collection Date:** 05/27/2014 9:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chlorobenzene	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Chloroethane	NELAP	0.0018	0.009		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Chloroform	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Chloromethane	NELAP	0.0018	0.009		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
cis-1,2-Dichloroethene	NELAP	0.0009	0.004	J	**0.002**	mg/Kg-dry	1	05/29/2014 2:23	99204
cis-1,3-Dichloropropene	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Dibromochloromethane	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Ethylbenzene	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
m,p-Xylenes	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Methyl tert-butyl ether	NELAP	0.0004	0.002		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Methylene chloride	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
o-Xylene	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Styrene	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Tetrachloroethene	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Toluene	NELAP	0.0009	0.004	J	**0.002**	mg/Kg-dry	1	05/29/2014 2:23	99204
trans-1,2-Dichloroethene	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
trans-1,3-Dichloropropene	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Trichloroethene	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Vinyl acetate	NELAP	0.0175	0.044		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Vinyl chloride	NELAP	0.0004	0.002		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Xylenes, Total	NELAP	0.0009	0.004		**ND**	mg/Kg-dry	1	05/29/2014 2:23	99204
Surr: 1,2-Dichloroethane-d4		0	72.2-131		**113.3**	%REC	1	05/29/2014 2:23	99204
Surr: 4-Bromofluorobenzene		0	82.1-116		**104.4**	%REC	1	05/29/2014 2:23	99204
Surr: Dibromofluoromethane		0	77.7-120		**106.2**	%REC	1	05/29/2014 2:23	99204
Surr: Toluene-d8		0	86-116		**98.9**	%REC	1	05/29/2014 2:23	99204

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: **TekLab, Inc.** Address: **5445 Horseshoe Lake Road** **Collinsville, IL 62234** Phone: **877-344-1003** Contact: **Shelly Hennessy** email: shennessy@teklabinc.com	Project Name: I-55 Chicago Cook Co Project No.: TDOT 2013-080 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** TT, JS

COC No.: 1 of 7

Lab Job No.: 14051473

Sample Temp: 4.8° c, ice

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.

ANALYSES

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids	Waste Characterization					Comments
	~~2045-5-B09-3~~			S	X	X					X	X	X	X						
	~~2045-5-B10-1~~																			
	~~2045-5-B10-2~~																			
	~~2045-5-B10-3~~																			
14051473 001	2045-5-B11-1	5/27/14	08:45																	0-8
002	2045-5-B11-1-DUP		08:50																	0-8
003	2045-5-B11-2		08:55																	8-16
004	2045-5-B11-3		09:00																	16-24
005	2045-5-B12		09:10																	0-8
006	2045-5-B13-1		09:30																	0-8
007	2045-5-B13-2		09:35																	8-16
008	2045-5-B13-3	5/27/14	09:40	S	X	X					X	X	X	X						16-24

Relinquished by:	Date/Time 5-27-14 15:20	Received by:	Date/Time 5-27-14 15:20
Relinquished by:	Date/Time 5-27-14 1700	Received by: FedEx	Date/Time 5/28/14 1054
Relinquished by:	Date/Time	Received by:	Date/Time

June 19, 2014

Colleen Grey
Andrews Engineering, Inc.
3300 Ginger Creek Drive
Springfield, IL 62711-7233
TEL: (217) 787-2334
FAX: (217) 787-9495

RE: IDOT2013-080 **WorkOrder:** 14060468

Dear Colleen Grey:

TEKLAB, INC received 19 samples on 6/9/2014 1:55:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Shelly A Hennessy

Shelly A. Hennessy
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com

Report Contents

Client: Andrews Engineering, Inc.
Work Order: 14060468
Client Project: IDOT2013-080
Report Date: 19-Jun-14

This reporting package includes the following:

Client: Andrews Engineering, Inc. **Work Order:** 14060468

Client Project: IDOT2013-080 **Report Date:** 19-Jun-14

Abbr Definition

CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.
DNI	Did not ignite
DUP	Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MB	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TNTC	Too numerous to count (> 200 CFU)

Qualifiers

# -	Unknown hydrocarbon	B -	Analyte detected in associated Method Blank
E -	Value above quantitation range	H -	Holding times exceeded
J -	Analyte detected below quantitation limits	M -	Manual Integration used to determine area response
ND -	Not Detected at the Reporting Limit	R -	RPD outside accepted recovery limits
S -	Spike Recovery outside recovery limits	X -	Value exceeds Maximum Contaminant Level

Case Narrative

http://www.teklabinc.com/

Client: Andrews Engineering, Inc.
Work Order: 14060468
Client Project: IDOT2013-080
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Cooler Receipt Temp: 1.4 °C

Locations and Accreditations

	Collinsville	Springfield	Kansas City	Collinsville Air
Address	5445 Horseshoe Lake Road	3920 Pintail Dr	8421 Nieman Road	5445 Horseshoe Lake Road
	Collinsville, IL 62234-7425	Springfield, IL 62711-9415	Lenexa, KS 66214	Collinsville, IL 62234-7425
Phone	(618) 344-1004	(217) 698-1004	(913) 541-1998	(618) 344-1004
Fax	(618) 344-1005	(217) 698-1005	(913) 541-1998	(618) 344-1005
Email	jhriley@teklabinc.com	KKlostermann@teklabinc.com	dthompson@teklabinc.com	EHurley@teklabinc.com

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2015	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2015	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2014	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2014	Collinsville
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2014	Collinsville
Arkansas	ADEQ	88-0966		3/14/2015	Collinsville
Illinois	IDPH	17584		5/31/2015	Collinsville
Kentucky	KDEP	98006		12/31/2014	Collinsville
Kentucky	UST	0073		1/31/2015	Collinsville
Missouri	MDNR	00930		5/31/2015	Collinsville
Oklahoma	ODEQ	9978		8/31/2014	Collinsville

Client: Andrews Engineering, Inc. **Work Order:** 14060468

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Lab ID: 14060468-019 **Client Sample ID:** 2045-5-B17-1

Matrix: SOLID **Collection Date:** 06/05/2014 13:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		**9.8**	%	1	06/10/2014 16:43	R191777
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		**90.2**	%	1	06/10/2014 16:43	R191777
SW-846 9045C									
pH (1:1)	NELAP	0	1		**7.68**		1	06/13/2014 15:52	R191936
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Lead	NELAP	0.006	0.007		**0.0257**	mg/L	1	06/16/2014 10:47	99689
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	**0.0233**	mg/L	1	06/11/2014 13:02	99567
Beryllium	NELAP	0.0003	0.001		**< 0.001**	mg/L	1	06/11/2014 13:02	99567
Boron	NELAP	1	2		**< 2**	mg/L	1	06/11/2014 13:02	99567
Cadmium	NELAP	0.0003	0.002		**< 0.002**	mg/L	1	06/11/2014 13:02	99567
Chromium	NELAP	0.004	0.01		**< 0.01**	mg/L	1	06/11/2014 13:02	99567
Cobalt	NELAP	0.0022	0.01		**< 0.01**	mg/L	1	06/11/2014 13:02	99567
Iron	NELAP	0.007	0.02		**0.0258**	mg/L	1	06/11/2014 13:02	99567
Lead	NELAP	0.006	0.007		**< 0.007**	mg/L	1	06/11/2014 13:02	99567
Manganese	NELAP	0.0016	0.005		**< 0.005**	mg/L	1	06/11/2014 13:02	99567
Nickel	NELAP	0.0033	0.01	J	**0.0094**	mg/L	1	06/11/2014 13:02	99567
Selenium	NELAP	0.022	0.05		**< 0.05**	mg/L	1	06/11/2014 13:02	99567
Silver	NELAP	0.003	0.01		**< 0.01**	mg/L	1	06/11/2014 13:02	99567
Zinc	NELAP	0.0021	0.01	J	**0.0046**	mg/L	1	06/11/2014 13:02	99567
SW-846 1312, 3020A, 7010 METALS IN SPLP EXTRACT BY GFAA									
Antimony, SPLP by GFAA	NELAP	0.0017	0.005		**< 0.005**	mg/L	1	06/11/2014 15:01	99571
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		**< 0.002**	mg/L	1	06/11/2014 14:05	99571
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		**< 0.0002**	mg/L	1	06/11/2014 13:29	99576
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81	J	**4.53**	mg/Kg-dry	1	06/11/2014 18:30	99558
Arsenic	NELAP	1.23	2.45		**7.92**	mg/Kg-dry	1	06/11/2014 15:23	99555
Barium	NELAP	0.25	0.49		**66.1**	mg/Kg-dry	1	06/11/2014 15:23	99555
Beryllium	NELAP	0.05	0.1		**0.25**	mg/Kg-dry	1	06/11/2014 15:23	99555
Boron	NELAP	0.98	1.96		**17.5**	mg/Kg-dry	1	06/11/2014 15:23	99555
Cadmium	NELAP	0.1	0.2	J	**0.13**	mg/Kg-dry	1	06/11/2014 15:23	99555
Calcium	NELAP	2.45	4.9		**154000**	mg/Kg-dry	1	06/11/2014 15:23	99555
Chromium	NELAP	0.49	0.98		**5.64**	mg/Kg-dry	1	06/11/2014 15:23	99555
Cobalt	NELAP	0.49	0.98		**2.78**	mg/Kg-dry	1	06/11/2014 15:23	99555
Copper	NELAP	0.49	0.98		**41.7**	mg/Kg-dry	1	06/11/2014 15:23	99555
Iron	NELAP	0.98	1.96		**11900**	mg/Kg-dry	1	06/11/2014 15:23	99555
Lead	NELAP	1.96	3.92		**106**	mg/Kg-dry	1	06/11/2014 15:23	99555
Magnesium	NELAP	0.49	0.98		**88500**	mg/Kg-dry	1	06/11/2014 15:23	99555
Manganese	NELAP	0.25	0.49		**170**	mg/Kg-dry	1	06/11/2014 15:23	99555
Nickel	NELAP	0.49	0.98		**9.6**	mg/Kg-dry	1	06/11/2014 15:23	99555
Potassium	NELAP	4.9	9.8		**1020**	mg/Kg-dry	1	06/11/2014 15:23	99555
Silver	NELAP	0.49	0.54		**< 0.54**	mg/Kg-dry	1	06/11/2014 15:23	99555
Sodium	NELAP	2.45	4.9		**1260**	mg/Kg-dry	1	06/11/2014 15:23	99555
Thallium	NELAP	2.45	2.55		**< 2.55**	mg/Kg-dry	1	06/11/2014 15:23	99555

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Lab ID: 14060468-019 **Client Sample ID:** 2045-5-B17-1

Matrix: SOLID **Collection Date:** 06/05/2014 13:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.49	0.98		**7.42**	mg/Kg-dry	1	06/11/2014 15:23	99555
Zinc	NELAP	0.49	0.98		**71.6**	mg/Kg-dry	1	06/11/2014 15:23	99555
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588		**< 0.588**	mg/Kg-dry	1	06/11/2014 11:21	99566
SW-846 7471B									
Mercury	NELAP	0.003	0.011		**0.405**	mg/Kg-dry	1	06/12/2014 10:03	99600
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.734	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
1,2-Dichlorobenzene	NELAP	0.878	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
1,3-Dichlorobenzene	NELAP	0.927	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
1,4-Dichlorobenzene	NELAP	0.878	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
2,4,5-Trichlorophenol	NELAP	0.524	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
2,4,6-Trichlorophenol	NELAP	0.696	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
2,4-Dichlorophenol	NELAP	0.668	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
2,4-Dimethylphenol	NELAP	0.701	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
2,4-Dinitrophenol	NELAP	0.591	5.52		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
2,4-Dinitrotoluene	NELAP	0.574	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
2,6-Dinitrotoluene	NELAP	0.596	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
2-Chloronaphthalene	NELAP	0.662	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
2-Chlorophenol	NELAP	0.701	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
2-Methylnaphthalene	NELAP	0.657	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
2-Nitroaniline	NELAP	0.502	5.52		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
2-Nitrophenol	NELAP	0.618	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
3,3´-Dichlorobenzidine	NELAP	1.1	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
3-Nitroaniline	NELAP	0.453	5.52		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
4,6-Dinitro-2-methylphenol	NELAP	0.596	5.52		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
4-Bromophenyl phenyl ether	NELAP	0.508	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
4-Chloro-3-methylphenol	NELAP	0.607	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
4-Chloroaniline	NELAP	0.668	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
4-Chlorophenyl phenyl ether	NELAP	0.547	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
4-Nitroaniline	NELAP	0.502	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
4-Nitrophenol	NELAP	0.541	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Acenaphthene	NELAP	0.092	0.188		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Acenaphthylene	NELAP	0.092	0.188		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Anthracene	NELAP	0.092	0.188		**0.203**	mg/Kg-dry	5	06/16/2014 22:35	99644
Benzo(a)anthracene	NELAP	0.092	0.188		**0.609**	mg/Kg-dry	5	06/16/2014 22:35	99644
Benzo(a)pyrene	NELAP	0.092	0.188		**0.453**	mg/Kg-dry	5	06/17/2014 17:02	99644
Benzo(b)fluoranthene	NELAP	0.092	0.188		**0.781**	mg/Kg-dry	5	06/17/2014 17:02	99644
Benzo(g,h,i)perylene	NELAP	0.092	0.188		**ND**	mg/Kg-dry	5	06/17/2014 17:02	99644
Benzo(k)fluoranthene	NELAP	0.092	0.188		**0.312**	mg/Kg-dry	5	06/17/2014 17:02	99644
Bis(2-chloroethoxy)methane	NELAP	0.646	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Bis(2-chloroethyl)ether	NELAP	0.784	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Bis(2-chloroisopropyl)ether	NELAP	0.629	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Bis(2-ethylhexyl)phthalate	NELAP	0.646	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Butyl benzyl phthalate	NELAP	0.558	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Carbazole		0.674	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Chrysene	NELAP	0.092	0.188		**0.646**	mg/Kg-dry	5	06/16/2014 22:35	99644

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Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Dibenzo(a,h)anthracene	NELAP	0.092	0.188		**ND**	mg/Kg-dry	5	06/17/2014 17:02	99644
Dibenzofuran	NELAP	0.696	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Diethyl phthalate	NELAP	0.53	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Dimethyl phthalate	NELAP	0.502	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Di-n-butyl phthalate	NELAP	0.569	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Di-n-octyl phthalate	NELAP	0.574	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Fluoranthene	NELAP	0.092	0.188		**1.44**	mg/Kg-dry	5	06/16/2014 22:35	99644
Fluorene	NELAP	0.092	0.188		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Hexachlorobenzene	NELAP	0.541	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Hexachlorobutadiene	NELAP	0.856	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Hexachlorocyclopentadiene	NELAP	0.563	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Hexachloroethane	NELAP	0.922	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Indeno(1,2,3-cd)pyrene	NELAP	0.092	0.188		**ND**	mg/Kg-dry	5	06/17/2014 17:02	99644
Isophorone	NELAP	0.651	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
m,p-Cresol	NELAP	0.696	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Naphthalene	NELAP	0.092	0.188		**0.251**	mg/Kg-dry	5	06/16/2014 22:35	99644
Nitrobenzene	NELAP	0.69	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
N-Nitroso-di-n-propylamine	NELAP	0.607	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
N-Nitrosodiphenylamine	NELAP	0.508	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
o-Cresol	NELAP	0.651	2.76		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Pentachlorophenol	NELAP	3.64	11		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Phenanthrene	NELAP	0.092	0.188		**1.14**	mg/Kg-dry	5	06/16/2014 22:35	99644
Phenol	NELAP	0.64	1.93		**ND**	mg/Kg-dry	5	06/16/2014 22:35	99644
Pyrene	NELAP	0.092	0.188		**1.16**	mg/Kg-dry	5	06/16/2014 22:35	99644
Surr: 2,4,6-Tribromophenol		0	33.7-105		**65.9**	%REC	5	06/16/2014 22:35	99644
Surr: 2-Fluorobiphenyl		0	24.2-75.3		**55.9**	%REC	5	06/16/2014 22:35	99644
Surr: 2-Fluorophenol		0	43-85.2		**44**	%REC	5	06/16/2014 22:35	99644
Surr: Nitrobenzene-d5		0	35.5-60.5		**47.3**	%REC	5	06/16/2014 22:35	99644
Surr: Phenol-d5		0	48.9-86.9		**51.1**	%REC	5	06/16/2014 22:35	99644
Surr: p-Terphenyl-d14		0	40.2-101		**66.8**	%REC	5	06/16/2014 22:35	99644

Internal standard Perylene-d12 recovered outside method acceptance criteria. Subsequent analysis produced similar results. Matrix interference. Elevated reporting limit due to sample extract composition.

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0368	0.184		**0.25**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
1,1,2,2-Tetrachloroethane	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
1,1,2-Trichloroethane	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
1,1-Dichloroethane	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
1,1-Dichloroethene	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
1,2-Dichloroethane	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
1,2-Dichloropropane	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
1,3-Dichloropropene, Total		0.0368	0.147		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
2-Butanone	NELAP	0.368	1.84		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
2-Hexanone	NELAP	0.368	1.84		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
4-Methyl-2-pentanone	NELAP	0.368	1.84		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Acetone	NELAP	0.368	1.84		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Benzene	NELAP	0.0184	0.037		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Bromodichloromethane	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603

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Matrix: SOLID **Collection Date:** 06/05/2014 13:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromoform	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Bromomethane	NELAP	0.0735	0.368		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Carbon disulfide	NELAP	0.11	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Carbon tetrachloride	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Chlorobenzene	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Chloroethane	NELAP	0.0735	0.368		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Chloroform	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Chloromethane	NELAP	0.0735	0.368	J	**0.147**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
cis-1,2-Dichloroethene	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
cis-1,3-Dichloropropene	NELAP	0.0368	0.147		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Dibromochloromethane	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Ethylbenzene	NELAP	0.0368	0.184	J	**0.045**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
m,p-Xylenes	NELAP	0.0368	0.184	J	**0.171**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Methyl tert-butyl ether	NELAP	0.0184	0.074		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Methylene chloride	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
o-Xylene	NELAP	0.0368	0.184	J	**0.175**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Styrene	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Tetrachloroethene	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Toluene	NELAP	0.0368	0.184	J	**0.051**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
trans-1,2-Dichloroethene	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
trans-1,3-Dichloropropene	NELAP	0.0368	0.147		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Trichloroethene	NELAP	0.0368	0.184		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Vinyl acetate	NELAP	0.735	1.84		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Vinyl chloride	NELAP	0.0184	0.074		**ND**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Xylenes, Total	NELAP	0.0368	0.184		**0.346**	mg/Kg-dry	12.5	06/11/2014 20:47	99603
Surr: 1,2-Dichloroethane-d4		0	72.2-131		**95.1**	%REC	12.5	06/11/2014 20:47	99603
Surr: 4-Bromofluorobenzene		0	82.1-116		**95.9**	%REC	12.5	06/11/2014 20:47	99603
Surr: Dibromofluoromethane		0	77.7-120		**88.3**	%REC	12.5	06/11/2014 20:47	99603
Surr: Toluene-d8		0	86-116		**105.4**	%REC	12.5	06/11/2014 20:47	99603

Elevated reporting limit due to high levels of target and non-target analytes.

ANDREWS ENGINEERING INC

CHAIN OF CUSTODY RECORD

Client Contact

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3300 Ginger Creek Drive
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Laboratory

Lab: **TekLab, Inc.**
Address: **5445 Horseshoe Lake Road**
Collinsville, IL 62234
Phone: **877-344-1003**
Contact: **Shelly Hennessy**
email: shennessy@teklabinc.com

Project Name: I55 Chicago Cook Co
Project No.: IDOT 2013-080
TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other
Sampler: TI, MM

COC No.: 1 of 2
Lab Job No.: 14060468
Sample Temp: 1.4 ice

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.

Teklab, Inc. Courier Pick Up

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
	~~2045-5-B17-3~~	6/5/14		S	X	X					X	X	X	X						
14060468-01	2045-5-B18-1		1110																	0-8
-02	2045-5-B18-1DUP		1115																	0-8
-03	2045-5-B18-2		1130																	8-12
	~~2045-5-B18-3~~																			
-04	2045-5-B19-1		1020																	0-8
-05	2045-5-B19-2		1025																	8-16
-06	2045-5-B19-3		1040																	16-24
-07	2045-5-B20-1		0940																	0-8
-08	2045-5-B20-2		0950																	8-16
-09	2045-5-B20-3		1000																	16-24
-10	2045-5-B21-1	6/5/14	1150	S	X	X					X	X	X	X						0-6

Relinquished by:		Date/Time 6/5/14	18:00
Relinquished by:		Date/Time 6/6/14	1510
Relinquished by:		Date/Time 6/9/14	1:55pm

Received by:		Date/Time 6/5/14 @ 1800
Received by:		Date/Time 6/9/14 11:45
Received by:		Date/Time 6/9/14 1355

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: **TekLab, Inc.** Address: **5445 Horseshoe Lake Road** **Collinsville, IL 62234** Phone: **877-344-1003** Contact: **Shelly Hennessy** email: shennessy@teklabinc.com	Project Name: I55 Chicago Cook Co Project No.: IDOT 2013 - 080 TAT: ☒ 15 BD ☐ 10 BD ☐ 5 BD ☐ 2 BD ____ Other **Sampler:** TT, MM

COC No.: 2 of 2

Lab Job No.: 140604468

Sample Temp:

Special Instructions:

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

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

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

Matrix Key:

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

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids	Waste Characterization					Comments
140604468-011	2045-5-B21-1 DUP	6/5/14	1155	S	X	X					X	X	X	X						0-6
012	2045-5-B21-2		1205																	6-12
013	2045-5-B22-1		1220																	0-8
014	2045-5-B22-2		1225																	8-16
015	2045-5-B22-3		1240																	16-24
016	2045-5-B23-1		1300																	0-8
017	2045-5-B23-2		1305																	8-16
018	2045-5-B23-3		1315																	16-24
	~~2045-5-B24-1~~																			
	~~2045-5-B24-1 DUP~~																			
	~~2045-5-B24-2~~	↓																		
019	2045-5-B17-1	6/5/14	1345	S	X	X				☒	X	X	X	X						0-5

Relinquished by:	Date/Time 6/5/14 18:00	Received by:	Date/Time 6/5/14 @ 1800
Relinquished by:	Date/Time 6/6/14 1510	Received by:	Date/Time 6/9/14 11:45 am
Relinquished by:	Date/Time 6-9-14 1:53pm	Received by:	Date/Time 6/9/14 1355