



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: FAP 525 (US Route 20) Office Phone Number, if available: _____

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

16N 600 to 17N 500 block of US 20

City: Unincorporated State: IL Zip Code: 60140

County: Kane Township: Hampshire

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

Latitude: 42.10065 Longitude: -88.48502
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

IEPA Site Number(s), if assigned: _____ BOL: 0890455025 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: FAP 525 (US Route 20)

Latitude: 42.10065 Longitude: -88.48502

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located [35 Ill. Adm. Code 1100.610(a)]:

LOCATIONS 2396-3-B01 THROUGH -B05, -B07 THROUGH -B21, -B23 THROUGH -B27, -B29, -B30, -B32, AND -B33 WERE SAMPLED ADJACENT TO ISGS SITE 2396V-1. SEE FIGURES 2 AND 3, AND TABLE 3a OF THE REVISED PRELIMINARY SITE INVESTIGATION.

- 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 ANALYTICAL REPORT - WORK ORDER NUMBERS 13101214, 13101297, AND 13111397

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))

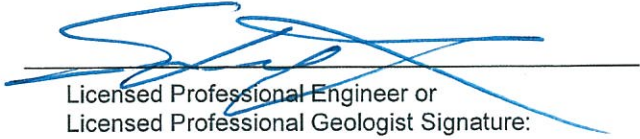
Company Name: IDOT Bureau of Design and Environment

Street Address: 2300 South Dirksen Parkway

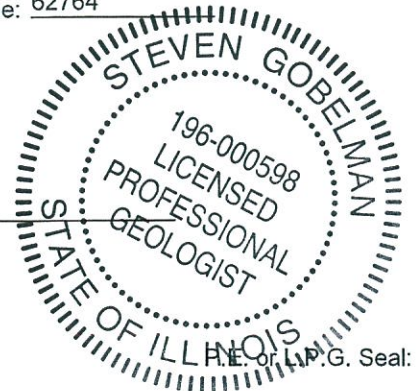
City: Springfield State: IL Zip Code: 62764

Phone: 217.785.4246

Steven Gobelman
Printed Name:


 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

8/23/14
 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
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl Acetate
Vinyl Chloride
Xylenes, total
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 2396V-1
Kane County Forest Preserve

Sample ID	2396-3-B01	2396-3-B02	2396-3-B03	2396-3-B04	2396-3-B05	2396-3-B07	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)	0-7	0-7	0-7	0-7	0-7	0-7						
Sample Date	10/23/2013	10/23/2013	10/23/2013	10/23/2013	10/23/2013	10/22/2013						
PID	0	0	0	0	0	0						
Sample pH	8.22	8.03	8.1	8.09	7.62	8.21						
Matrix	Soil	Soil	Soil	Soil	Soil	Soil						
No Contaminants of Concern Noted.												

Sample ID	2396-3-B07 DUP	2396-3-B08	2396-3-B09	2396-3-B10	2396-3-B11	2396-3-B12	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)	0-7	0-7	0-7	0-7	0-7	0-7						
Sample Date	10/22/2013	10/23/2013	10/22/2013	10/22/2013	10/22/2013	10/22/2013						
PID	0	0	0	0	0	0						
Sample pH	8	7.46	8.31	8.24	8.64	8.39						
Matrix	Soil	Soil	Soil	Soil	Soil	Soil						
No Contaminants of Concern Noted.												

Sample ID	2396-3-B13	2396-3-B14	2396-3-B15	2396-3-B16	2396-3-B17	2396-3-B18	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)	0-7	0-7	0-7	0-7	0-7	0-7						
Sample Date	10/22/2013	10/22/2013	10/22/2013	10/22/2013	10/22/2013	10/23/2013						
PID	0	0	0	0	0	0						
Sample pH	8.21	8.01	8.51	8.67	7.82	7.74						
Matrix	Soil	Soil	Soil	Soil	Soil	Soil						
No Contaminants of Concern Noted.												

Sample ID	2396-3-B18 DUP	2396-3-B19	2396-3-B20	2396-3-B21	2396-3-B23	2396-3-B24	2396-3-B25	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)	0-7	0-7	0-7	0-7	0-7	0-7	0-7						
Sample Date	10/23/2013	10/23/2013	10/23/2013	11/25/2013	11/25/2013	11/25/2013	10/23/2013						
PID	0	0	0	0	0	0	0						
Sample pH	7.87	7.13	7.88	6.98	8.39	7.96	8.37						
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
No Contaminants of Concern Noted.													

Sample ID	2396-3-B26	2396-3-B27	2396-3-B29	2396-3-B29 DUP	2396-3-B30	2396-3-B32	2396-3-B33	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)	0-7	0-7	0-7	0-7	0-7	0-7	0-7						
Sample Date	10/23/2013	10/23/2013	10/23/2013	10/23/2013	10/23/2013	10/23/2013	11/25/2013						
PID	0	0	0	0	0	0	0						
Sample pH	8.24	7.77	8.27	8.06	8.2	8.56	8.11						
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil						
No Contaminants of Concern Noted.													

November 01, 2013

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



RE: IDOT2013-033

WorkOrder: 13101214

Dear Colleen Grey:

TEKLAB, INC received 12 samples on 10/24/2013 8:05:00 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
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

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Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

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: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Cooler Receipt Temp: 2.4 °C

Locations and Accreditations

	<u>Collinsville</u>	<u>Springfield</u>	<u>Kansas City</u>	<u>Collinsville Air</u>
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	3920 Pintail Dr Springfield, IL 62711-9415	8421 Nieman Road Lenexa, KS 66214	5445 Horseshoe Lake Road 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

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

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-001

Client Sample ID: 2396-3-B12

Matrix: SOLID

Collection Date: 10/22/2013 15:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		11.6	%	1	10/24/2013 16:29	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		88.4	%	1	10/24/2013 16:29	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.39		1	10/24/2013 20:17	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 10:01	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0563	mg/L	1	10/28/2013 15:07	93084
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/28/2013 15:07	93084
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 15:07	93084
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 15:07	93084
Chromium	NELAP	0.004	0.01	J	0.0074	mg/L	1	10/28/2013 15:07	93084
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/28/2013 15:07	93084
Iron	NELAP	0.007	0.02	SX	6.34	mg/L	1	10/28/2013 15:07	93084
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 15:07	93084
Manganese	NELAP	0.0016	0.005		0.0414	mg/L	1	10/28/2013 15:07	93084
Nickel	NELAP	0.0033	0.01	J	0.0055	mg/L	1	10/28/2013 15:07	93084
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 15:07	93084
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 15:07	93084
Zinc	NELAP	0.0021	0.01		0.0183	mg/L	1	10/28/2013 15:07	93084
<i>MS QC limits for Fe are not applicable due to high sample/spike ratio.</i>									
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	10/29/2013 19:01	93086
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 9:23	93086
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 13:38	93093
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.55	4.9		< 4.9	mg/Kg-dry	1	10/28/2013 18:00	93064
Arsenic	NELAP	1.2	2.4		7.45	mg/Kg-dry	1	10/25/2013 12:12	93050
Barium	NELAP	0.24	0.48		90.4	mg/Kg-dry	1	10/25/2013 12:12	93050
Beryllium	NELAP	0.05	0.1		0.67	mg/Kg-dry	1	10/25/2013 12:12	93050
Boron	NELAP	0.96	1.92		9.23	mg/Kg-dry	1	10/25/2013 12:12	93050
Cadmium	NELAP	0.1	0.19		< 0.19	mg/Kg-dry	1	10/25/2013 12:12	93050
Calcium	NELAP	2.4	4.81		57200	mg/Kg-dry	1	10/25/2013 12:12	93050
Chromium	NELAP	0.48	0.96	X	20.6	mg/Kg-dry	1	10/25/2013 12:12	93050
Cobalt	NELAP	0.48	0.96		11.6	mg/Kg-dry	1	10/25/2013 12:12	93050
Copper	NELAP	0.48	0.96		16.5	mg/Kg-dry	1	10/25/2013 12:12	93050
Iron	NELAP	0.96	1.92	X	20300	mg/Kg-dry	1	10/25/2013 12:12	93050
Lead	NELAP	1.92	3.85		12.4	mg/Kg-dry	1	10/25/2013 12:12	93050
Magnesium	NELAP	0.48	0.96		26200	mg/Kg-dry	1	10/25/2013 12:12	93050
Manganese	NELAP	0.24	0.48	X	803	mg/Kg-dry	1	10/25/2013 12:12	93050
Nickel	NELAP	0.48	0.96		19.3	mg/Kg-dry	1	10/25/2013 12:12	93050
Potassium	NELAP	4.81	9.62		1890	mg/Kg-dry	1	10/25/2013 12:12	93050
Silver	NELAP	0.48	0.53		< 0.53	mg/Kg-dry	1	10/25/2013 12:12	93050
Sodium	NELAP	2.4	4.81		361	mg/Kg-dry	1	10/25/2013 12:12	93050
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	10/25/2013 12:12	93050

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-001

Client Sample ID: 2396-3-B12

Matrix: SOLID

Collection Date: 10/22/2013 15:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.48	0.96		33.9	mg/Kg-dry	1	10/25/2013 12:12	93050
Zinc	NELAP	0.48	0.96		37.5	mg/Kg-dry	1	10/25/2013 12:12	93050
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588		< 0.588	mg/Kg-dry	1	10/29/2013 9:24	93058
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.013	mg/Kg-dry	1	10/25/2013 9:05	93035
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.151	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
1,2-Dichlorobenzene	NELAP	0.18	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
1,3-Dichlorobenzene	NELAP	0.19	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
1,4-Dichlorobenzene	NELAP	0.18	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
2,4,5-Trichlorophenol	NELAP	0.108	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
2,4,6-Trichlorophenol	NELAP	0.143	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
2,4-Dichlorophenol	NELAP	0.137	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
2,4-Dimethylphenol	NELAP	0.144	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
2,4-Dinitrophenol	NELAP	0.121	1.13		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
2,4-Dinitrotoluene	NELAP	0.118	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
2,6-Dinitrotoluene	NELAP	0.122	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
2-Chloronaphthalene	NELAP	0.136	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
2-Chlorophenol	NELAP	0.144	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
2-Methylnaphthalene	NELAP	0.135	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
2-Nitroaniline	NELAP	0.103	1.13		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
2-Nitrophenol	NELAP	0.127	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
3,3'-Dichlorobenzidine	NELAP	0.226	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
3-Nitroaniline	NELAP	0.093	1.13		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
4,6-Dinitro-2-methylphenol	NELAP	0.122	1.13		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
4-Bromophenyl phenyl ether	NELAP	0.104	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
4-Chloro-3-methylphenol	NELAP	0.125	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
4-Chloroaniline	NELAP	0.137	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
4-Chlorophenyl phenyl ether	NELAP	0.112	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
4-Nitroaniline	NELAP	0.103	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
4-Nitrophenol	NELAP	0.111	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Acenaphthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Acenaphthylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Benzo(a)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Benzo(a)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Benzo(b)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Benzo(g,h,i)perylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Benzo(k)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Bis(2-chloroethoxy)methane	NELAP	0.132	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Bis(2-chloroethyl)ether	NELAP	0.161	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Bis(2-chloroisopropyl)ether	NELAP	0.129	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Bis(2-ethylhexyl)phthalate	NELAP	0.132	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Butyl benzyl phthalate	NELAP	0.114	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Carbazole		0.138	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Chrysene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-001

Client Sample ID: 2396-3-B12

Matrix: SOLID

Collection Date: 10/22/2013 15:20

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	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Dibenzofuran	NELAP	0.143	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Diethyl phthalate	NELAP	0.109	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Dimethyl phthalate	NELAP	0.103	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Di-n-butyl phthalate	NELAP	0.117	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Di-n-octyl phthalate	NELAP	0.118	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Fluorene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Hexachlorobenzene	NELAP	0.111	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Hexachlorobutadiene	NELAP	0.176	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Hexachlorocyclopentadiene	NELAP	0.116	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Hexachloroethane	NELAP	0.189	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Isophorone	NELAP	0.134	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
m,p-Cresol	NELAP	0.143	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Naphthalene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Nitrobenzene	NELAP	0.142	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
N-Nitroso-di-n-propylamine	NELAP	0.125	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
N-Nitrosodiphenylamine	NELAP	0.104	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
o-Cresol	NELAP	0.134	0.566		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Pentachlorophenol	NELAP	0.747	2.26		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Phenanthrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Phenol	NELAP	0.131	0.396		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 11:44	93101
Surr: 2,4,6-Tribromophenol		0	32.7-130		80.9	%REC	1	10/29/2013 11:44	93101
Surr: 2-Fluorobiphenyl		0	34.1-116		74.6	%REC	1	10/29/2013 11:44	93101
Surr: 2-Fluorophenol		0	30.5-99		71.2	%REC	1	10/29/2013 11:44	93101
Surr: Nitrobenzene-d5		0	34.1-101		68.4	%REC	1	10/29/2013 11:44	93101
Surr: Phenol-d5		0	34.9-110		82.9	%REC	1	10/29/2013 11:44	93101
Surr: p-Terphenyl-d14		0	41.7-124		86.8	%REC	1	10/29/2013 11:44	93101
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
1,1,1,2,2-Tetrachloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
1,1,2-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
1,1-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
1,1-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
1,2-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
1,2-Dichloropropane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
1,3-Dichloropropene, Total		0.0009	0.004		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
2-Butanone	NELAP	0.0091	0.046		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
2-Hexanone	NELAP	0.0091	0.046		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
4-Methyl-2-pentanone	NELAP	0.0091	0.046		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Acetone	NELAP	0.0091	0.046	J	0.042	mg/Kg-dry	1	10/25/2013 20:44	93080
Benzene	NELAP	0.0005	0.001		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Bromodichloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Bromoform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Bromomethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/25/2013 20:44	93080

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-001

Client Sample ID: 2396-3-B12

Matrix: SOLID

Collection Date: 10/22/2013 15:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbon disulfide	NELAP	0.0027	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Carbon tetrachloride	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Chlorobenzene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Chloroethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Chloroform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Chloromethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
cis-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
cis-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Dibromochloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Ethylbenzene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
m,p-Xylenes	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Methylene chloride	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
o-Xylene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Styrene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Tetrachloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Toluene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
trans-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
trans-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Trichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Vinyl acetate	NELAP	0.0182	0.046		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Xylenes, Total	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 20:44	93080
Surr: 1,2-Dichloroethane-d4		0	72.2-131		98.9	%REC	1	10/25/2013 20:44	93080
Surr: 4-Bromofluorobenzene		0	82.1-116		95.2	%REC	1	10/25/2013 20:44	93080
Surr: Dibromofluoromethane		0	77.7-120		100.6	%REC	1	10/25/2013 20:44	93080
Surr: Toluene-d8		0	86-116		89	%REC	1	10/25/2013 20:44	93080

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-002

Client Sample ID: 2396-3-B13

Matrix: SOLID

Collection Date: 10/22/2013 15:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		16.7	%	1	10/24/2013 16:29	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		83.3	%	1	10/24/2013 16:29	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.21		1	10/24/2013 20:20	R183241
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0457	mg/L	1	10/28/2013 15:18	93084
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/28/2013 15:18	93084
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 15:18	93084
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 15:18	93084
Chromium	NELAP	0.004	0.01	J	0.006	mg/L	1	10/28/2013 15:18	93084
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/28/2013 15:18	93084
Iron	NELAP	0.007	0.02		4.11	mg/L	1	10/28/2013 15:18	93084
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 15:18	93084
Manganese	NELAP	0.0016	0.005		0.0148	mg/L	1	10/28/2013 15:18	93084
Nickel	NELAP	0.0033	0.01	J	0.0033	mg/L	1	10/28/2013 15:18	93084
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 15:18	93084
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 15:18	93084
Zinc	NELAP	0.0021	0.01		0.0129	mg/L	1	10/28/2013 15:18	93084
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	10/29/2013 19:04	93086
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 9:27	93086
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 13:40	93093
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/28/2013 18:04	93064
Arsenic	NELAP	1.23	2.45		7.05	mg/Kg-dry	1	10/25/2013 12:18	93050
Barium	NELAP	0.25	0.49		129	mg/Kg-dry	1	10/25/2013 12:18	93050
Beryllium	NELAP	0.05	0.1		0.81	mg/Kg-dry	1	10/25/2013 12:18	93050
Boron	NELAP	0.98	1.96		13.1	mg/Kg-dry	1	10/25/2013 12:18	93050
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	10/25/2013 12:18	93050
Calcium	NELAP	2.45	4.9		16800	mg/Kg-dry	1	10/25/2013 12:18	93050
Chromium	NELAP	0.49	0.98	X	25.1	mg/Kg-dry	1	10/25/2013 12:18	93050
Cobalt	NELAP	0.49	0.98		8.9	mg/Kg-dry	1	10/25/2013 12:18	93050
Copper	NELAP	0.49	0.98		17.9	mg/Kg-dry	1	10/25/2013 12:18	93050
Iron	NELAP	0.98	1.96	X	24200	mg/Kg-dry	1	10/25/2013 12:18	93050
Lead	NELAP	1.96	3.92		9.37	mg/Kg-dry	1	10/25/2013 12:18	93050
Magnesium	NELAP	0.49	0.98		12500	mg/Kg-dry	1	10/25/2013 12:18	93050
Manganese	NELAP	0.25	0.49		551	mg/Kg-dry	1	10/25/2013 12:18	93050
Nickel	NELAP	0.49	0.98		24.6	mg/Kg-dry	1	10/25/2013 12:18	93050
Potassium	NELAP	4.9	9.8		2460	mg/Kg-dry	1	10/25/2013 12:18	93050
Silver	NELAP	0.49	0.54		< 0.54	mg/Kg-dry	1	10/25/2013 12:18	93050
Sodium	NELAP	2.45	4.9		297	mg/Kg-dry	1	10/25/2013 12:18	93050
Thallium	NELAP	2.45	2.55		< 2.55	mg/Kg-dry	1	10/25/2013 12:18	93050
Vanadium	NELAP	0.49	0.98		34.5	mg/Kg-dry	1	10/25/2013 12:18	93050
Zinc	NELAP	0.49	0.98		49	mg/Kg-dry	1	10/25/2013 12:18	93050

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-002

Client Sample ID: 2396-3-B13

Matrix: SOLID

Collection Date: 10/22/2013 15:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.35	0.6		< 0.6	mg/Kg-dry	1	10/29/2013 9:27	93058
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.031	mg/Kg-dry	1	10/25/2013 9:07	93035
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.161	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
1,2-Dichlorobenzene	NELAP	0.193	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
1,3-Dichlorobenzene	NELAP	0.204	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
1,4-Dichlorobenzene	NELAP	0.193	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
2,4,5-Trichlorophenol	NELAP	0.115	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
2,4,6-Trichlorophenol	NELAP	0.153	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
2,4-Dichlorophenol	NELAP	0.147	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
2,4-Dimethylphenol	NELAP	0.154	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
2,4-Dinitrophenol	NELAP	0.13	1.21		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
2,4-Dinitrotoluene	NELAP	0.126	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
2,6-Dinitrotoluene	NELAP	0.131	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
2-Chloronaphthalene	NELAP	0.145	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
2-Chlorophenol	NELAP	0.154	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
2-Methylnaphthalene	NELAP	0.144	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
2-Nitroaniline	NELAP	0.11	1.21		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
2-Nitrophenol	NELAP	0.136	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
3,3'-Dichlorobenzidine	NELAP	0.242	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
3-Nitroaniline	NELAP	0.099	1.21		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
4,6-Dinitro-2-methylphenol	NELAP	0.131	1.21		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
4-Bromophenyl phenyl ether	NELAP	0.111	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
4-Chloro-3-methylphenol	NELAP	0.133	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
4-Chloroaniline	NELAP	0.147	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
4-Chlorophenyl phenyl ether	NELAP	0.12	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
4-Nitroaniline	NELAP	0.11	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
4-Nitrophenol	NELAP	0.119	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Acenaphthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Acenaphthylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Benzo(a)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Benzo(a)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Benzo(b)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Benzo(g,h,i)perylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Benzo(k)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Bis(2-chloroethoxy)methane	NELAP	0.142	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Bis(2-chloroethyl)ether	NELAP	0.172	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Bis(2-chloroisopropyl)ether	NELAP	0.138	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Bis(2-ethylhexyl)phthalate	NELAP	0.142	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Butyl benzyl phthalate	NELAP	0.122	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Carbazole		0.148	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Chrysene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Dibenzo(a,h)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Dibenzofuran	NELAP	0.153	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Diethyl phthalate	NELAP	0.116	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-002

Client Sample ID: 2396-3-B13

Matrix: SOLID

Collection Date: 10/22/2013 15:05

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	0.11	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Di-n-butyl phthalate	NELAP	0.125	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Di-n-octyl phthalate	NELAP	0.126	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Fluorene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Hexachlorobenzene	NELAP	0.119	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Hexachlorobutadiene	NELAP	0.188	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Hexachlorocyclopentadiene	NELAP	0.124	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Hexachloroethane	NELAP	0.202	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Isophorone	NELAP	0.143	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
m,p-Cresol	NELAP	0.153	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Naphthalene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Nitrobenzene	NELAP	0.151	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
N-Nitroso-di-n-propylamine	NELAP	0.133	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
N-Nitrosodiphenylamine	NELAP	0.111	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
o-Cresol	NELAP	0.143	0.606		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Pentachlorophenol	NELAP	0.8	2.42		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Phenanthrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Phenol	NELAP	0.141	0.424		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 14:30	93101
Surr: 2,4,6-Tribromophenol		0	32.7-130		73.2	%REC	1	10/29/2013 14:30	93101
Surr: 2-Fluorobiphenyl		0	34.1-116		73.1	%REC	1	10/29/2013 14:30	93101
Surr: 2-Fluorophenol		0	30.5-99		70.8	%REC	1	10/29/2013 14:30	93101
Surr: Nitrobenzene-d5		0	34.1-101		69	%REC	1	10/29/2013 14:30	93101
Surr: Phenol-d5		0	34.9-110		82.7	%REC	1	10/29/2013 14:30	93101
Surr: p-Terphenyl-d14		0	41.7-124		80.5	%REC	1	10/29/2013 14:30	93101
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
2-Butanone	NELAP	0.0084	0.042	J	0.012	mg/Kg-dry	1	10/25/2013 21:11	93080
2-Hexanone	NELAP	0.0084	0.042		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
4-Methyl-2-pentanone	NELAP	0.0084	0.042		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Acetone	NELAP	0.0084	0.042		0.07	mg/Kg-dry	1	10/25/2013 21:11	93080
Benzene	NELAP	0.0004	0.001		0.002	mg/Kg-dry	1	10/25/2013 21:11	93080
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Bromomethane	NELAP	0.0017	0.008		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Carbon disulfide	NELAP	0.0025	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-002

Client Sample ID: 2396-3-B13

Matrix: SOLID

Collection Date: 10/22/2013 15:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0017	0.008		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Chloromethane	NELAP	0.0017	0.008		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Ethylbenzene	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	10/25/2013 21:11	93080
m,p-Xylenes	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	10/25/2013 21:11	93080
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
o-Xylene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/25/2013 21:11	93080
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Toluene	NELAP	0.0008	0.004		0.004	mg/Kg-dry	1	10/25/2013 21:11	93080
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Vinyl acetate	NELAP	0.0169	0.042		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/25/2013 21:11	93080
Xylenes, Total	NELAP	0.0008	0.004	J	0.003	mg/Kg-dry	1	10/25/2013 21:11	93080
Surr: 1,2-Dichloroethane-d4		0	72.2-131		93.4	%REC	1	10/25/2013 21:11	93080
Surr: 4-Bromofluorobenzene		0	82.1-116		101.8	%REC	1	10/25/2013 21:11	93080
Surr: Dibromofluoromethane		0	77.7-120		98.6	%REC	1	10/25/2013 21:11	93080
Surr: Toluene-d8		0	86-116		94.7	%REC	1	10/25/2013 21:11	93080

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-003

Client Sample ID: 2396-3-B14

Matrix: SOLID

Collection Date: 10/22/2013 14:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		8.6	%	1	10/24/2013 16:30	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		91.4	%	1	10/24/2013 16:30	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.01		1	10/24/2013 20:25	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 10:05	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0508	mg/L	1	10/28/2013 15:22	93084
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/28/2013 15:22	93084
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 15:22	93084
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 15:22	93084
Chromium	NELAP	0.004	0.01	J	0.0073	mg/L	1	10/28/2013 15:22	93084
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/28/2013 15:22	93084
Iron	NELAP	0.007	0.02	X	5.87	mg/L	1	10/28/2013 15:22	93084
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 15:22	93084
Manganese	NELAP	0.0016	0.005		0.0394	mg/L	1	10/28/2013 15:22	93084
Nickel	NELAP	0.0033	0.01	J	0.0064	mg/L	1	10/28/2013 15:22	93084
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 15:22	93084
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 15:22	93084
Zinc	NELAP	0.0021	0.01		0.0182	mg/L	1	10/28/2013 15:22	93084
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	10/29/2013 19:08	93086
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 9:30	93086
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 13:47	93093
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.41	4.63		< 4.63	mg/Kg-dry	1	10/28/2013 18:07	93064
Arsenic	NELAP	1.18	2.36		4.11	mg/Kg-dry	1	10/25/2013 12:25	93050
Barium	NELAP	0.24	0.47		39.4	mg/Kg-dry	1	10/25/2013 12:25	93050
Beryllium	NELAP	0.05	0.09		0.44	mg/Kg-dry	1	10/25/2013 12:25	93050
Boron	NELAP	0.94	1.89		13.5	mg/Kg-dry	1	10/25/2013 12:25	93050
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	10/25/2013 12:25	93050
Calcium	NELAP	2.36	4.72	S	87800	mg/Kg-dry	1	10/25/2013 12:25	93050
Chromium	NELAP	0.47	0.94	X	13.4	mg/Kg-dry	1	10/25/2013 12:25	93050
Cobalt	NELAP	0.47	0.94		5.36	mg/Kg-dry	1	10/25/2013 12:25	93050
Copper	NELAP	0.47	0.94		12.7	mg/Kg-dry	1	10/25/2013 12:25	93050
Iron	NELAP	0.94	1.89	S	13400	mg/Kg-dry	1	10/25/2013 12:25	93050
Lead	NELAP	1.89	3.77		5.29	mg/Kg-dry	1	10/25/2013 12:25	93050
Magnesium	NELAP	0.47	0.94	S	35500	mg/Kg-dry	1	10/25/2013 12:25	93050
Manganese	NELAP	0.24	0.47	S	330	mg/Kg-dry	1	10/25/2013 12:25	93050
Nickel	NELAP	0.47	0.94		13.2	mg/Kg-dry	1	10/25/2013 12:25	93050
Potassium	NELAP	4.72	9.43	S	2430	mg/Kg-dry	1	10/25/2013 12:25	93050
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	10/25/2013 12:25	93050
Sodium	NELAP	2.36	4.72		183	mg/Kg-dry	1	10/25/2013 12:25	93050
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	10/25/2013 12:25	93050

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-003

Client Sample ID: 2396-3-B14

Matrix: SOLID

Collection Date: 10/22/2013 14:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.47	0.94		18.7	mg/Kg-dry	1	10/25/2013 12:25	93050
Zinc	NELAP	0.47	0.94		29.5	mg/Kg-dry	1	10/25/2013 12:25	93050
<i>MS QC limits for Ca, Fe, Mg, Mn, and K are not applicable due to high sample/spike ratio.</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.337	0.577	S	< 0.577	mg/Kg-dry	1	10/29/2013 9:31	93058
<i>Se - Matrix interference present in sample. Confirmed by bench spike.</i>									
SW-846 7471B									
Mercury	NELAP	0.003	0.01		0.012	mg/Kg-dry	1	10/25/2013 9:09	93035
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.147	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
1,2-Dichlorobenzene	NELAP	0.175	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
1,3-Dichlorobenzene	NELAP	0.185	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
1,4-Dichlorobenzene	NELAP	0.175	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
2,4,5-Trichlorophenol	NELAP	0.105	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
2,4,6-Trichlorophenol	NELAP	0.139	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
2,4-Dichlorophenol	NELAP	0.133	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
2,4-Dimethylphenol	NELAP	0.14	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
2,4-Dinitrophenol	NELAP	0.118	1.1		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
2,4-Dinitrotoluene	NELAP	0.115	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
2,6-Dinitrotoluene	NELAP	0.119	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
2-Chloronaphthalene	NELAP	0.132	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
2-Chlorophenol	NELAP	0.14	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
2-Methylnaphthalene	NELAP	0.131	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
2-Nitroaniline	NELAP	0.1	1.1		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
2-Nitrophenol	NELAP	0.123	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
3,3'-Dichlorobenzidine	NELAP	0.22	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
3-Nitroaniline	NELAP	0.09	1.1		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
4,6-Dinitro-2-methylphenol	NELAP	0.119	1.1		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
4-Bromophenyl phenyl ether	NELAP	0.101	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
4-Chloro-3-methylphenol	NELAP	0.121	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
4-Chloroaniline	NELAP	0.133	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
4-Chlorophenyl phenyl ether	NELAP	0.109	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
4-Nitroaniline	NELAP	0.1	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
4-Nitrophenol	NELAP	0.108	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Acenaphthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Acenaphthylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Benzo(a)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Benzo(a)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Benzo(b)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Benzo(g,h,i)perylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Benzo(k)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Bis(2-chloroethoxy)methane	NELAP	0.129	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Bis(2-chloroethyl)ether	NELAP	0.157	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Bis(2-chloroisopropyl)ether	NELAP	0.126	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Bis(2-ethylhexyl)phthalate	NELAP	0.129	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Butyl benzyl phthalate	NELAP	0.111	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-003

Client Sample ID: 2396-3-B14

Matrix: SOLID

Collection Date: 10/22/2013 14:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbazole		0.134	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Chrysene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Dibenzo(a,h)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Dibenzofuran	NELAP	0.139	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Diethyl phthalate	NELAP	0.106	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Dimethyl phthalate	NELAP	0.1	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Di-n-butyl phthalate	NELAP	0.114	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Di-n-octyl phthalate	NELAP	0.115	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Fluorene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Hexachlorobenzene	NELAP	0.108	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Hexachlorobutadiene	NELAP	0.171	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Hexachlorocyclopentadiene	NELAP	0.112	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Hexachloroethane	NELAP	0.184	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Isophorone	NELAP	0.13	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
m,p-Cresol	NELAP	0.139	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Naphthalene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Nitrobenzene	NELAP	0.138	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
N-Nitroso-di-n-propylamine	NELAP	0.121	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
N-Nitrosodiphenylamine	NELAP	0.101	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
o-Cresol	NELAP	0.13	0.551		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Pentachlorophenol	NELAP	0.727	2.2		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Phenanthrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Phenol	NELAP	0.128	0.386		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 15:03	93101
Surr: 2,4,6-Tribromophenol		0	32.7-130		70.6	%REC	1	10/29/2013 15:03	93101
Surr: 2-Fluorobiphenyl		0	34.1-116		70.3	%REC	1	10/29/2013 15:03	93101
Surr: 2-Fluorophenol		0	30.5-99		67.5	%REC	1	10/29/2013 15:03	93101
Surr: Nitrobenzene-d5		0	34.1-101		66.1	%REC	1	10/29/2013 15:03	93101
Surr: Phenol-d5		0	34.9-110		80.2	%REC	1	10/29/2013 15:03	93101
Surr: p-Terphenyl-d14		0	41.7-124		82.3	%REC	1	10/29/2013 15:03	93101
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
1,1,2,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
2-Butanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
2-Hexanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
4-Methyl-2-pentanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Acetone	NELAP	0.0074	0.037		0.038	mg/Kg-dry	1	10/26/2013 0:42	93122
Benzene	NELAP	0.0004	0.001		0.003	mg/Kg-dry	1	10/26/2013 0:42	93122
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-003

Client Sample ID: 2396-3-B14

Matrix: SOLID

Collection Date: 10/22/2013 14:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Bromomethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Carbon disulfide	NELAP	0.0022	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Chlorobenzene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Chloroethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Chloromethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Ethylbenzene	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	10/26/2013 0:42	93122
m,p-Xylenes	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	10/26/2013 0:42	93122
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Methylene chloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
o-Xylene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 0:42	93122
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Toluene	NELAP	0.0007	0.004		0.005	mg/Kg-dry	1	10/26/2013 0:42	93122
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Vinyl acetate	NELAP	0.0148	0.037		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 0:42	93122
Xylenes, Total	NELAP	0.0007	0.004	J	0.004	mg/Kg-dry	1	10/26/2013 0:42	93122
Surr: 1,2-Dichloroethane-d4			0 72.2-131		111.9	%REC	1	10/26/2013 0:42	93122
Surr: 4-Bromofluorobenzene			0 82.1-116		114.6	%REC	1	10/26/2013 0:42	93122
Surr: Dibromofluoromethane			0 77.7-120		107.2	%REC	1	10/26/2013 0:42	93122
Surr: Toluene-d8			0 86-116		89.9	%REC	1	10/26/2013 0:42	93122

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-004

Client Sample ID: 2396-3-B15

Matrix: SOLID

Collection Date: 10/22/2013 14:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		16.7	%	1	10/24/2013 16:30	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		83.3	%	1	10/24/2013 16:30	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.51		1	10/24/2013 20:28	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 10:09	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0797	mg/L	1	10/28/2013 15:25	93084
Beryllium	NELAP	0.0003	0.001	J	0.0003	mg/L	1	10/28/2013 15:25	93084
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 15:25	93084
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 15:25	93084
Chromium	NELAP	0.004	0.01		0.0137	mg/L	1	10/28/2013 15:25	93084
Cobalt	NELAP	0.0022	0.01	J	0.0025	mg/L	1	10/28/2013 15:25	93084
Iron	NELAP	0.007	0.02	X	11.6	mg/L	1	10/28/2013 15:25	93084
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 15:25	93084
Manganese	NELAP	0.0016	0.005		0.0796	mg/L	1	10/28/2013 15:25	93084
Nickel	NELAP	0.0033	0.01		0.0122	mg/L	1	10/28/2013 15:25	93084
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 15:25	93084
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 15:25	93084
Zinc	NELAP	0.0021	0.01		0.0323	mg/L	1	10/28/2013 15:25	93084
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	10/29/2013 19:12	93086
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 9:34	93086
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 13:49	93093
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/28/2013 18:18	93064
Arsenic	NELAP	1.2	2.4		4.85	mg/Kg-dry	1	10/25/2013 13:15	93050
Barium	NELAP	0.24	0.48		46.4	mg/Kg-dry	1	10/25/2013 13:15	93050
Beryllium	NELAP	0.05	0.1		0.53	mg/Kg-dry	1	10/25/2013 13:15	93050
Boron	NELAP	0.96	1.92		15.7	mg/Kg-dry	1	10/25/2013 13:15	93050
Cadmium	NELAP	0.1	0.19		< 0.19	mg/Kg-dry	1	10/25/2013 13:15	93050
Calcium	NELAP	2.4	4.81	S	88400	mg/Kg-dry	1	10/25/2013 13:15	93050
Chromium	NELAP	0.48	0.96	X	15.8	mg/Kg-dry	1	10/25/2013 13:15	93050
Cobalt	NELAP	0.48	0.96		6.48	mg/Kg-dry	1	10/25/2013 13:15	93050
Copper	NELAP	0.48	0.96		14.5	mg/Kg-dry	1	10/25/2013 13:15	93050
Iron	NELAP	0.96	1.92	SX	15300	mg/Kg-dry	1	10/25/2013 13:15	93050
Lead	NELAP	1.92	3.85		6.19	mg/Kg-dry	1	10/25/2013 13:15	93050
Magnesium	NELAP	0.48	0.96	S	35900	mg/Kg-dry	1	10/25/2013 13:15	93050
Manganese	NELAP	0.24	0.48	S	364	mg/Kg-dry	1	10/28/2013 10:53	93050
Nickel	NELAP	0.48	0.96		16.2	mg/Kg-dry	1	10/25/2013 13:15	93050
Potassium	NELAP	4.81	9.62	S	2840	mg/Kg-dry	1	10/25/2013 13:15	93050
Silver	NELAP	0.48	0.53		< 0.53	mg/Kg-dry	1	10/25/2013 13:15	93050
Sodium	NELAP	2.4	4.81		427	mg/Kg-dry	1	10/25/2013 13:15	93050
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	10/28/2013 10:53	93050

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-004

Client Sample ID: 2396-3-B15

Matrix: SOLID

Collection Date: 10/22/2013 14:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.48	0.96		21.8	mg/Kg-dry	1	10/25/2013 13:15	93050
Zinc	NELAP	0.48	0.96		30.5	mg/Kg-dry	1	10/25/2013 13:15	93050
<i>MS QC limits for Mn are not applicable due to high sample/spike ratio.</i>									
<i>MS QC limits for Ca, Fe, Mg, and K are not applicable due to high sample/spike ratio.</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588	S	< 0.588	mg/Kg-dry	1	10/29/2013 9:51	93058
<i>Se - Matrix interference present in sample. Confirmed by bench spike.</i>									
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.015	mg/Kg-dry	1	10/25/2013 9:11	93035
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.158	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
1,2-Dichlorobenzene	NELAP	0.189	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
1,3-Dichlorobenzene	NELAP	0.2	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
1,4-Dichlorobenzene	NELAP	0.189	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
2,4,5-Trichlorophenol	NELAP	0.113	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
2,4,6-Trichlorophenol	NELAP	0.15	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
2,4-Dichlorophenol	NELAP	0.144	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
2,4-Dimethylphenol	NELAP	0.151	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
2,4-Dinitrophenol	NELAP	0.127	1.19		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
2,4-Dinitrotoluene	NELAP	0.124	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
2,6-Dinitrotoluene	NELAP	0.128	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
2-Chloronaphthalene	NELAP	0.143	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
2-Chlorophenol	NELAP	0.151	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
2-Methylnaphthalene	NELAP	0.141	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
2-Nitroaniline	NELAP	0.108	1.19		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
2-Nitrophenol	NELAP	0.133	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
3,3'-Dichlorobenzidine	NELAP	0.238	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
3-Nitroaniline	NELAP	0.097	1.19		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
4,6-Dinitro-2-methylphenol	NELAP	0.128	1.19		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
4-Bromophenyl phenyl ether	NELAP	0.109	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
4-Chloro-3-methylphenol	NELAP	0.131	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
4-Chloroaniline	NELAP	0.144	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
4-Chlorophenyl phenyl ether	NELAP	0.118	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
4-Nitroaniline	NELAP	0.108	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
4-Nitrophenol	NELAP	0.116	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Acenaphthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Acenaphthylene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Anthracene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Benzo(a)anthracene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Benzo(a)pyrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Benzo(b)fluoranthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Benzo(g,h,i)perylene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Benzo(k)fluoranthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Bis(2-chloroethoxy)methane	NELAP	0.139	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Bis(2-chloroethyl)ether	NELAP	0.169	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Bis(2-chloroisopropyl)ether	NELAP	0.135	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Bis(2-ethylhexyl)phthalate	NELAP	0.139	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-004

Client Sample ID: 2396-3-B15

Matrix: SOLID

Collection Date: 10/22/2013 14:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Butyl benzyl phthalate	NELAP	0.12	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Carbazole		0.145	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Chrysene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Dibenzo(a,h)anthracene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Dibenzofuran	NELAP	0.15	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Diethyl phthalate	NELAP	0.114	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Dimethyl phthalate	NELAP	0.108	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Di-n-butyl phthalate	NELAP	0.122	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Di-n-octyl phthalate	NELAP	0.124	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Fluoranthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Fluorene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Hexachlorobenzene	NELAP	0.116	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Hexachlorobutadiene	NELAP	0.184	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Hexachlorocyclopentadiene	NELAP	0.121	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Hexachloroethane	NELAP	0.198	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Isophorone	NELAP	0.14	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
m,p-Cresol	NELAP	0.15	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Naphthalene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Nitrobenzene	NELAP	0.149	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
N-Nitroso-di-n-propylamine	NELAP	0.131	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
N-Nitrosodiphenylamine	NELAP	0.109	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
o-Cresol	NELAP	0.14	0.594		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Pentachlorophenol	NELAP	0.784	2.38		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Phenanthrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Phenol	NELAP	0.138	0.416		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Pyrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 15:36	93101
Surr: 2,4,6-Tribromophenol		0	32.7-130		67.5	%REC	1	10/29/2013 15:36	93101
Surr: 2-Fluorobiphenyl		0	34.1-116		63	%REC	1	10/29/2013 15:36	93101
Surr: 2-Fluorophenol		0	30.5-99		58.9	%REC	1	10/29/2013 15:36	93101
Surr: Nitrobenzene-d5		0	34.1-101		57	%REC	1	10/29/2013 15:36	93101
Surr: Phenol-d5		0	34.9-110		69	%REC	1	10/29/2013 15:36	93101
Surr: p-Terphenyl-d14		0	41.7-124		78.5	%REC	1	10/29/2013 15:36	93101

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
1,1,2,2-Tetrachloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
1,1,2-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
1,1-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
1,1-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
1,2-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
1,2-Dichloropropane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
1,3-Dichloropropene, Total		0.001	0.004		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
2-Butanone	NELAP	0.0101	0.05		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
2-Hexanone	NELAP	0.0101	0.05		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
4-Methyl-2-pentanone	NELAP	0.0101	0.05		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Acetone	NELAP	0.0101	0.05		0.067	mg/Kg-dry	1	10/26/2013 1:09	93122
Benzene	NELAP	0.0005	0.001		ND	mg/Kg-dry	1	10/26/2013 1:09	93122

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-004

Client Sample ID: 2396-3-B15

Matrix: SOLID

Collection Date: 10/22/2013 14:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromodichloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Bromoform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Bromomethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Carbon disulfide	NELAP	0.003	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Carbon tetrachloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Chlorobenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Chloroethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Chloroform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Chloromethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
cis-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
cis-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Dibromochloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Ethylbenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
m,p-Xylenes	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Methylene chloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
o-Xylene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Styrene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Tetrachloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Toluene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
trans-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
trans-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Trichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Vinyl acetate	NELAP	0.0202	0.05		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Xylenes, Total	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 1:09	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		113.3	%REC	1	10/26/2013 1:09	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		108.3	%REC	1	10/26/2013 1:09	93122
Surr: Dibromofluoromethane		0	77.7-120		106.7	%REC	1	10/26/2013 1:09	93122
Surr: Toluene-d8		0	86-116		92.5	%REC	1	10/26/2013 1:09	93122

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-005

Client Sample ID: 2396-3-B16

Matrix: SOLID

Collection Date: 10/22/2013 14:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		7.2	%	1	10/24/2013 16:31	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		92.8	%	1	10/24/2013 16:31	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.67		1	10/24/2013 20:30	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 10:12	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0579	mg/L	1	10/28/2013 15:29	93084
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/28/2013 15:29	93084
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 15:29	93084
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 15:29	93084
Chromium	NELAP	0.004	0.01	J	0.0081	mg/L	1	10/28/2013 15:29	93084
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/28/2013 15:29	93084
Iron	NELAP	0.007	0.02	X	6.93	mg/L	1	10/28/2013 15:29	93084
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 15:29	93084
Manganese	NELAP	0.0016	0.005		0.044	mg/L	1	10/28/2013 15:29	93084
Nickel	NELAP	0.0033	0.01	J	0.0067	mg/L	1	10/28/2013 15:29	93084
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 15:29	93084
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 15:29	93084
Zinc	NELAP	0.0021	0.01		0.0183	mg/L	1	10/28/2013 15:29	93084
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	10/29/2013 19:38	93086
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 9:37	93086
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 13:51	93093
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.55	4.9		< 4.9	mg/Kg-dry	1	10/28/2013 18:30	93064
Arsenic	NELAP	1.14	2.27		4.48	mg/Kg-dry	1	10/25/2013 13:33	93050
Barium	NELAP	0.23	0.45		42.5	mg/Kg-dry	1	10/25/2013 13:33	93050
Beryllium	NELAP	0.05	0.09		0.55	mg/Kg-dry	1	10/25/2013 13:33	93050
Boron	NELAP	0.91	1.82		15.4	mg/Kg-dry	1	10/25/2013 13:33	93050
Cadmium	NELAP	0.09	0.18		< 0.18	mg/Kg-dry	1	10/25/2013 13:33	93050
Calcium	NELAP	2.27	4.55		77000	mg/Kg-dry	1	10/25/2013 13:33	93050
Chromium	NELAP	0.45	0.91	X	15.6	mg/Kg-dry	1	10/25/2013 13:33	93050
Cobalt	NELAP	0.45	0.91		6.12	mg/Kg-dry	1	10/25/2013 13:33	93050
Copper	NELAP	0.45	0.91		14.3	mg/Kg-dry	1	10/25/2013 13:33	93050
Iron	NELAP	0.91	1.82	X	15500	mg/Kg-dry	1	10/25/2013 13:33	93050
Lead	NELAP	1.82	3.64		5.9	mg/Kg-dry	1	10/25/2013 13:33	93050
Magnesium	NELAP	0.45	0.91		34500	mg/Kg-dry	1	10/25/2013 13:33	93050
Manganese	NELAP	0.23	0.45		346	mg/Kg-dry	1	10/25/2013 13:33	93050
Nickel	NELAP	0.45	0.91		16.1	mg/Kg-dry	1	10/25/2013 13:33	93050
Potassium	NELAP	4.55	9.09		2760	mg/Kg-dry	1	10/25/2013 13:33	93050
Silver	NELAP	0.45	0.5		< 0.5	mg/Kg-dry	1	10/25/2013 13:33	93050
Sodium	NELAP	2.27	4.55		426	mg/Kg-dry	1	10/25/2013 13:33	93050
Thallium	NELAP	2.27	2.36		< 2.36	mg/Kg-dry	1	10/25/2013 13:33	93050

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-005

Client Sample ID: 2396-3-B16

Matrix: SOLID

Collection Date: 10/22/2013 14:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.45	0.91		21.9	mg/Kg-dry	1	10/25/2013 13:33	93050
Zinc	NELAP	0.45	0.91		36.3	mg/Kg-dry	1	10/25/2013 13:33	93050
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588		< 0.588	mg/Kg-dry	1	10/29/2013 10:05	93058
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.011	mg/Kg-dry	1	10/25/2013 9:18	93035
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.144	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
1,2-Dichlorobenzene	NELAP	0.172	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
1,3-Dichlorobenzene	NELAP	0.181	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
1,4-Dichlorobenzene	NELAP	0.172	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
2,4,5-Trichlorophenol	NELAP	0.103	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
2,4,6-Trichlorophenol	NELAP	0.136	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
2,4-Dichlorophenol	NELAP	0.131	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
2,4-Dimethylphenol	NELAP	0.137	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
2,4-Dinitrophenol	NELAP	0.115	1.08		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
2,4-Dinitrotoluene	NELAP	0.112	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
2,6-Dinitrotoluene	NELAP	0.117	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
2-Chloronaphthalene	NELAP	0.129	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
2-Chlorophenol	NELAP	0.137	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
2-Methylnaphthalene	NELAP	0.128	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
2-Nitroaniline	NELAP	0.098	1.08		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
2-Nitrophenol	NELAP	0.121	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
3,3'-Dichlorobenzidine	NELAP	0.216	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
3-Nitroaniline	NELAP	0.088	1.08		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
4,6-Dinitro-2-methylphenol	NELAP	0.117	1.08		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
4-Bromophenyl phenyl ether	NELAP	0.099	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
4-Chloro-3-methylphenol	NELAP	0.119	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
4-Chloroaniline	NELAP	0.131	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
4-Chlorophenyl phenyl ether	NELAP	0.107	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
4-Nitroaniline	NELAP	0.098	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
4-Nitrophenol	NELAP	0.106	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Acenaphthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Acenaphthylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Benzo(a)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Benzo(a)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Benzo(b)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Benzo(g,h,i)perylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Benzo(k)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Bis(2-chloroethoxy)methane	NELAP	0.126	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Bis(2-chloroethyl)ether	NELAP	0.153	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Bis(2-chloroisopropyl)ether	NELAP	0.123	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Bis(2-ethylhexyl)phthalate	NELAP	0.126	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Butyl benzyl phthalate	NELAP	0.109	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Carbazole		0.132	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Chrysene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-005

Client Sample ID: 2396-3-B16

Matrix: SOLID

Collection Date: 10/22/2013 14:10

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	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Dibenzofuran	NELAP	0.136	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Diethyl phthalate	NELAP	0.104	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Dimethyl phthalate	NELAP	0.098	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Di-n-butyl phthalate	NELAP	0.111	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Di-n-octyl phthalate	NELAP	0.112	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Fluorene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Hexachlorobenzene	NELAP	0.106	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Hexachlorobutadiene	NELAP	0.167	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Hexachlorocyclopentadiene	NELAP	0.11	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Hexachloroethane	NELAP	0.18	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Isophorone	NELAP	0.127	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
m,p-Cresol	NELAP	0.136	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Naphthalene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Nitrobenzene	NELAP	0.135	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
N-Nitroso-di-n-propylamine	NELAP	0.119	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
N-Nitrosodiphenylamine	NELAP	0.099	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
o-Cresol	NELAP	0.127	0.54		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Pentachlorophenol	NELAP	0.712	2.16		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Phenanthrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Phenol	NELAP	0.125	0.378		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 16:09	93101
Surr: 2,4,6-Tribromophenol		0	32.7-130		72.5	%REC	1	10/29/2013 16:09	93101
Surr: 2-Fluorobiphenyl		0	34.1-116		70.8	%REC	1	10/29/2013 16:09	93101
Surr: 2-Fluorophenol		0	30.5-99		69.7	%REC	1	10/29/2013 16:09	93101
Surr: Nitrobenzene-d5		0	34.1-101		67.1	%REC	1	10/29/2013 16:09	93101
Surr: Phenol-d5		0	34.9-110		82.4	%REC	1	10/29/2013 16:09	93101
Surr: p-Terphenyl-d14		0	41.7-124		81.7	%REC	1	10/29/2013 16:09	93101
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
2-Butanone	NELAP	0.0081	0.04		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
2-Hexanone	NELAP	0.0081	0.04		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
4-Methyl-2-pentanone	NELAP	0.0081	0.04		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Acetone	NELAP	0.0081	0.04	J	0.018	mg/Kg-dry	1	10/26/2013 1:36	93122
Benzene	NELAP	0.0004	0.001		0.002	mg/Kg-dry	1	10/26/2013 1:36	93122
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Bromomethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/26/2013 1:36	93122

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-005

Client Sample ID: 2396-3-B16

Matrix: SOLID

Collection Date: 10/22/2013 14:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbon disulfide	NELAP	0.0024	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Chloroethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Chloromethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Ethylbenzene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 1:36	93122
m,p-Xylenes	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	10/26/2013 1:36	93122
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Toluene	NELAP	0.0008	0.004	J	0.004	mg/Kg-dry	1	10/26/2013 1:36	93122
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Vinyl acetate	NELAP	0.0161	0.04		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 1:36	93122
Xylenes, Total	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	10/26/2013 1:36	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		111.7	%REC	1	10/26/2013 1:36	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		108.2	%REC	1	10/26/2013 1:36	93122
Surr: Dibromofluoromethane		0	77.7-120		105	%REC	1	10/26/2013 1:36	93122
Surr: Toluene-d8		0	86-116		89.7	%REC	1	10/26/2013 1:36	93122

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-006

Client Sample ID: 2396-3-B17

Matrix: SOLID

Collection Date: 10/22/2013 14:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		13.6	%	1	10/24/2013 16:31	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		86.4	%	1	10/24/2013 16:31	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.82		1	10/24/2013 20:33	R183241
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0399	mg/L	1	10/28/2013 15:33	93084
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/28/2013 15:33	93084
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 15:33	93084
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 15:33	93084
Chromium	NELAP	0.004	0.01	J	0.0049	mg/L	1	10/28/2013 15:33	93084
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/28/2013 15:33	93084
Iron	NELAP	0.007	0.02		3.8	mg/L	1	10/28/2013 15:33	93084
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 15:33	93084
Manganese	NELAP	0.0016	0.005		0.0174	mg/L	1	10/28/2013 15:33	93084
Nickel	NELAP	0.0033	0.01	J	0.0038	mg/L	1	10/28/2013 15:33	93084
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 15:33	93084
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 15:33	93084
Zinc	NELAP	0.0021	0.01		0.0113	mg/L	1	10/28/2013 15:33	93084
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	10/29/2013 19:42	93086
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 9:41	93086
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 13:54	93093
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.41	4.63		< 4.63	mg/Kg-dry	1	10/28/2013 18:41	93064
Arsenic	NELAP	1.2	2.4		2.91	mg/Kg-dry	1	10/25/2013 13:39	93050
Barium	NELAP	0.24	0.48		52.9	mg/Kg-dry	1	10/25/2013 13:39	93050
Beryllium	NELAP	0.05	0.1		0.48	mg/Kg-dry	1	10/25/2013 13:39	93050
Boron	NELAP	0.96	1.92		11	mg/Kg-dry	1	10/25/2013 13:39	93050
Cadmium	NELAP	0.1	0.19		< 0.19	mg/Kg-dry	1	10/25/2013 13:39	93050
Calcium	NELAP	2.4	4.81		90500	mg/Kg-dry	1	10/25/2013 13:39	93050
Chromium	NELAP	0.48	0.96	X	14.8	mg/Kg-dry	1	10/25/2013 13:39	93050
Cobalt	NELAP	0.48	0.96		4.18	mg/Kg-dry	1	10/25/2013 13:39	93050
Copper	NELAP	0.48	0.96		10.6	mg/Kg-dry	1	10/25/2013 13:39	93050
Iron	NELAP	0.96	1.92		13400	mg/Kg-dry	1	10/25/2013 13:39	93050
Lead	NELAP	1.92	3.85		5.16	mg/Kg-dry	1	10/25/2013 13:39	93050
Magnesium	NELAP	0.48	0.96		52800	mg/Kg-dry	1	10/25/2013 13:39	93050
Manganese	NELAP	0.24	0.48		229	mg/Kg-dry	1	10/25/2013 13:39	93050
Nickel	NELAP	0.48	0.96		12.5	mg/Kg-dry	1	10/25/2013 13:39	93050
Potassium	NELAP	4.81	9.62		1860	mg/Kg-dry	1	10/25/2013 13:39	93050
Silver	NELAP	0.48	0.53		< 0.53	mg/Kg-dry	1	10/25/2013 13:39	93050
Sodium	NELAP	2.4	4.81		256	mg/Kg-dry	1	10/25/2013 13:39	93050
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	10/25/2013 13:39	93050
Vanadium	NELAP	0.48	0.96		21.3	mg/Kg-dry	1	10/25/2013 13:39	93050
Zinc	NELAP	0.48	0.96		25.3	mg/Kg-dry	1	10/25/2013 13:39	93050

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-006

Client Sample ID: 2396-3-B17

Matrix: SOLID

Collection Date: 10/22/2013 14:00

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	10/29/2013 10:08	93058
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.029	mg/Kg-dry	1	10/25/2013 9:21	93035
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.155	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
1,2-Dichlorobenzene	NELAP	0.185	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
1,3-Dichlorobenzene	NELAP	0.196	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
1,4-Dichlorobenzene	NELAP	0.185	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
2,4,5-Trichlorophenol	NELAP	0.111	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
2,4,6-Trichlorophenol	NELAP	0.147	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
2,4-Dichlorophenol	NELAP	0.141	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
2,4-Dimethylphenol	NELAP	0.148	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
2,4-Dinitrophenol	NELAP	0.125	1.17		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
2,4-Dinitrotoluene	NELAP	0.121	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
2,6-Dinitrotoluene	NELAP	0.126	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
2-Chloronaphthalene	NELAP	0.14	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
2-Chlorophenol	NELAP	0.148	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
2-Methylnaphthalene	NELAP	0.139	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
2-Nitroaniline	NELAP	0.106	1.17		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
2-Nitrophenol	NELAP	0.131	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
3,3'-Dichlorobenzidine	NELAP	0.233	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
3-Nitroaniline	NELAP	0.096	1.17		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
4,6-Dinitro-2-methylphenol	NELAP	0.126	1.17		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
4-Bromophenyl phenyl ether	NELAP	0.107	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
4-Chloro-3-methylphenol	NELAP	0.128	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
4-Chloroaniline	NELAP	0.141	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
4-Chlorophenyl phenyl ether	NELAP	0.115	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
4-Nitroaniline	NELAP	0.106	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
4-Nitrophenol	NELAP	0.114	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Acenaphthene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Acenaphthylene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Anthracene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Benzo(a)anthracene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Benzo(a)pyrene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Benzo(b)fluoranthene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Benzo(g,h,i)perylene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Benzo(k)fluoranthene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Bis(2-chloroethoxy)methane	NELAP	0.136	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Bis(2-chloroethyl)ether	NELAP	0.166	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Bis(2-chloroisopropyl)ether	NELAP	0.133	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Bis(2-ethylhexyl)phthalate	NELAP	0.136	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Butyl benzyl phthalate	NELAP	0.118	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Carbazole		0.142	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Chrysene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Dibenzo(a,h)anthracene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Dibenzofuran	NELAP	0.147	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Diethyl phthalate	NELAP	0.112	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-006

Client Sample ID: 2396-3-B17

Matrix: SOLID

Collection Date: 10/22/2013 14:00

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	0.106	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Di-n-butyl phthalate	NELAP	0.12	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Di-n-octyl phthalate	NELAP	0.121	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Fluoranthene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Fluorene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Hexachlorobenzene	NELAP	0.114	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Hexachlorobutadiene	NELAP	0.181	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Hexachlorocyclopentadiene	NELAP	0.119	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Hexachloroethane	NELAP	0.195	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Isophorone	NELAP	0.138	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
m,p-Cresol	NELAP	0.147	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Naphthalene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Nitrobenzene	NELAP	0.146	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
N-Nitroso-di-n-propylamine	NELAP	0.128	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
N-Nitrosodiphenylamine	NELAP	0.107	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
o-Cresol	NELAP	0.138	0.583		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Pentachlorophenol	NELAP	0.769	2.33		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Phenanthrene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Phenol	NELAP	0.135	0.408		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Pyrene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	10/29/2013 16:43	93101
Surr: 2,4,6-Tribromophenol		0	32.7-130		75.1	%REC	1	10/29/2013 16:43	93101
Surr: 2-Fluorobiphenyl		0	34.1-116		72.8	%REC	1	10/29/2013 16:43	93101
Surr: 2-Fluorophenol		0	30.5-99		72.9	%REC	1	10/29/2013 16:43	93101
Surr: Nitrobenzene-d5		0	34.1-101		70	%REC	1	10/29/2013 16:43	93101
Surr: Phenol-d5		0	34.9-110		83.8	%REC	1	10/29/2013 16:43	93101
Surr: p-Terphenyl-d14		0	41.7-124		84.4	%REC	1	10/29/2013 16:43	93101
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
2-Butanone	NELAP	0.0079	0.039		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
2-Hexanone	NELAP	0.0079	0.039		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
4-Methyl-2-pentanone	NELAP	0.0079	0.039		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Acetone	NELAP	0.0079	0.039	J	0.022	mg/Kg-dry	1	10/26/2013 2:02	93122
Benzene	NELAP	0.0004	0.001		0.003	mg/Kg-dry	1	10/26/2013 2:02	93122
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Bromomethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Carbon disulfide	NELAP	0.0024	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-006

Client Sample ID: 2396-3-B17

Matrix: SOLID

Collection Date: 10/22/2013 14:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Chloromethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Ethylbenzene	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	10/26/2013 2:02	93122
m,p-Xylenes	NELAP	0.0008	0.004	J	0.003	mg/Kg-dry	1	10/26/2013 2:02	93122
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
o-Xylene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 2:02	93122
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Toluene	NELAP	0.0008	0.004		0.005	mg/Kg-dry	1	10/26/2013 2:02	93122
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Vinyl acetate	NELAP	0.0157	0.039		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 2:02	93122
Xylenes, Total	NELAP	0.0008	0.004	J	0.004	mg/Kg-dry	1	10/26/2013 2:02	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		111.6	%REC	1	10/26/2013 2:02	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		109.1	%REC	1	10/26/2013 2:02	93122
Surr: Dibromofluoromethane		0	77.7-120		105.1	%REC	1	10/26/2013 2:02	93122
Surr: Toluene-d8		0	86-116		90.3	%REC	1	10/26/2013 2:02	93122

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-007

Client Sample ID: 2396-3-B11

Matrix: SOLID

Collection Date: 10/22/2013 15:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		8	%	1	10/24/2013 16:31	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		92	%	1	10/24/2013 16:31	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.64		1	10/24/2013 20:52	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 10:33	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0796	mg/L	1	10/28/2013 15:44	93084
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/28/2013 15:44	93084
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 15:44	93084
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 15:44	93084
Chromium	NELAP	0.004	0.01	J	0.0077	mg/L	1	10/28/2013 15:44	93084
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/28/2013 15:44	93084
Iron	NELAP	0.007	0.02	X	5.59	mg/L	1	10/28/2013 15:44	93084
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 15:44	93084
Manganese	NELAP	0.0016	0.005		0.0391	mg/L	1	10/28/2013 15:44	93084
Nickel	NELAP	0.0033	0.01	J	0.0059	mg/L	1	10/28/2013 15:44	93084
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 15:44	93084
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 15:44	93084
Zinc	NELAP	0.0021	0.01		0.0123	mg/L	1	10/28/2013 15:44	93084
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	10/29/2013 19:53	93086
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 9:58	93086
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 13:56	93093
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.41	4.63		< 4.63	mg/Kg-dry	1	10/28/2013 18:44	93064
Arsenic	NELAP	1.18	2.36	J	2.22	mg/Kg-dry	1	10/25/2013 13:45	93050
Barium	NELAP	0.24	0.47		42.8	mg/Kg-dry	1	10/25/2013 13:45	93050
Beryllium	NELAP	0.05	0.09		0.5	mg/Kg-dry	1	10/25/2013 13:45	93050
Boron	NELAP	0.94	1.89		14.5	mg/Kg-dry	1	10/25/2013 13:45	93050
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	10/25/2013 13:45	93050
Calcium	NELAP	2.36	4.72		97100	mg/Kg-dry	1	10/25/2013 13:45	93050
Chromium	NELAP	0.47	0.94	X	14.9	mg/Kg-dry	1	10/25/2013 13:45	93050
Cobalt	NELAP	0.47	0.94		4.83	mg/Kg-dry	1	10/25/2013 13:45	93050
Copper	NELAP	0.47	0.94		12.6	mg/Kg-dry	1	10/25/2013 13:45	93050
Iron	NELAP	0.94	1.89		12500	mg/Kg-dry	1	10/25/2013 13:45	93050
Lead	NELAP	1.89	3.77		7.52	mg/Kg-dry	1	10/25/2013 13:45	93050
Magnesium	NELAP	0.47	0.94		44900	mg/Kg-dry	1	10/25/2013 13:45	93050
Manganese	NELAP	0.24	0.47		279	mg/Kg-dry	1	10/25/2013 13:45	93050
Nickel	NELAP	0.47	0.94		12.8	mg/Kg-dry	1	10/25/2013 13:45	93050
Potassium	NELAP	4.72	9.43		2720	mg/Kg-dry	1	10/25/2013 13:45	93050
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	10/25/2013 13:45	93050
Sodium	NELAP	2.36	4.72		217	mg/Kg-dry	1	10/25/2013 13:45	93050
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	10/28/2013 14:57	93050

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-007

Client Sample ID: 2396-3-B11

Matrix: SOLID

Collection Date: 10/22/2013 15:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.47	0.94		21	mg/Kg-dry	1	10/25/2013 13:45	93050
Zinc	NELAP	0.47	0.94		19.7	mg/Kg-dry	1	10/25/2013 13:45	93050
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588		< 0.588	mg/Kg-dry	1	10/29/2013 10:12	93058
SW-846 7471B									
Mercury	NELAP	0.003	0.01		0.012	mg/Kg-dry	1	10/25/2013 9:23	93035
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.145	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
1,2-Dichlorobenzene	NELAP	0.173	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
1,3-Dichlorobenzene	NELAP	0.183	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
1,4-Dichlorobenzene	NELAP	0.173	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
2,4,5-Trichlorophenol	NELAP	0.103	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
2,4,6-Trichlorophenol	NELAP	0.137	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
2,4-Dichlorophenol	NELAP	0.132	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
2,4-Dimethylphenol	NELAP	0.138	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
2,4-Dinitrophenol	NELAP	0.116	1.09		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
2,4-Dinitrotoluene	NELAP	0.113	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
2,6-Dinitrotoluene	NELAP	0.117	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
2-Chloronaphthalene	NELAP	0.131	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
2-Chlorophenol	NELAP	0.138	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
2-Methylnaphthalene	NELAP	0.129	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
2-Nitroaniline	NELAP	0.099	1.09		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
2-Nitrophenol	NELAP	0.122	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
3,3'-Dichlorobenzidine	NELAP	0.218	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
3-Nitroaniline	NELAP	0.089	1.09		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
4,6-Dinitro-2-methylphenol	NELAP	0.117	1.09		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
4-Bromophenyl phenyl ether	NELAP	0.1	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
4-Chloro-3-methylphenol	NELAP	0.12	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
4-Chloroaniline	NELAP	0.132	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
4-Chlorophenyl phenyl ether	NELAP	0.108	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
4-Nitroaniline	NELAP	0.099	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
4-Nitrophenol	NELAP	0.107	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Acenaphthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Acenaphthylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Benzo(a)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Benzo(a)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Benzo(b)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Benzo(g,h,i)perylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Benzo(k)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Bis(2-chloroethoxy)methane	NELAP	0.127	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Bis(2-chloroethyl)ether	NELAP	0.154	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Bis(2-chloroisopropyl)ether	NELAP	0.124	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Bis(2-ethylhexyl)phthalate	NELAP	0.127	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Butyl benzyl phthalate	NELAP	0.11	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Carbazole		0.133	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Chrysene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-007

Client Sample ID: 2396-3-B11

Matrix: SOLID

Collection Date: 10/22/2013 15:35

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	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Dibenzofuran	NELAP	0.137	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Diethyl phthalate	NELAP	0.104	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Dimethyl phthalate	NELAP	0.099	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Di-n-butyl phthalate	NELAP	0.112	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Di-n-octyl phthalate	NELAP	0.113	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Fluorene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Hexachlorobenzene	NELAP	0.107	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Hexachlorobutadiene	NELAP	0.169	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Hexachlorocyclopentadiene	NELAP	0.111	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Hexachloroethane	NELAP	0.182	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Isophorone	NELAP	0.128	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
m,p-Cresol	NELAP	0.137	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Naphthalene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Nitrobenzene	NELAP	0.136	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
N-Nitroso-di-n-propylamine	NELAP	0.12	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
N-Nitrosodiphenylamine	NELAP	0.1	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
o-Cresol	NELAP	0.128	0.544		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Pentachlorophenol	NELAP	0.718	2.18		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Phenanthrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Phenol	NELAP	0.126	0.381		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 17:16	93101
Surr: 2,4,6-Tribromophenol		0	32.7-130		66.8	%REC	1	10/29/2013 17:16	93101
Surr: 2-Fluorobiphenyl		0	34.1-116		66.8	%REC	1	10/29/2013 17:16	93101
Surr: 2-Fluorophenol		0	30.5-99		67.7	%REC	1	10/29/2013 17:16	93101
Surr: Nitrobenzene-d5		0	34.1-101		62.7	%REC	1	10/29/2013 17:16	93101
Surr: Phenol-d5		0	34.9-110		78.5	%REC	1	10/29/2013 17:16	93101
Surr: p-Terphenyl-d14		0	41.7-124		78.4	%REC	1	10/29/2013 17:16	93101
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
1,1,2,2-Tetrachloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
1,1,2-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
1,1-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
1,1-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
1,2-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
1,2-Dichloropropane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
1,3-Dichloropropene, Total		0.0009	0.003		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
2-Butanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
2-Hexanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
4-Methyl-2-pentanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Acetone	NELAP	0.0086	0.043	J	0.018	mg/Kg-dry	1	10/26/2013 2:28	93122
Benzene	NELAP	0.0004	0.001		0.001	mg/Kg-dry	1	10/26/2013 2:28	93122
Bromodichloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Bromoform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Bromomethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/26/2013 2:28	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-007

Client Sample ID: 2396-3-B11

Matrix: SOLID

Collection Date: 10/22/2013 15:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbon disulfide	NELAP	0.0026	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Carbon tetrachloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Chlorobenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Chloroethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Chloroform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Chloromethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
cis-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
cis-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Dibromochloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Ethylbenzene	NELAP	0.0009	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 2:28	93122
m,p-Xylenes	NELAP	0.0009	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 2:28	93122
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Methylene chloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
o-Xylene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Styrene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Tetrachloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Toluene	NELAP	0.0009	0.004	J	0.002	mg/Kg-dry	1	10/26/2013 2:28	93122
trans-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
trans-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Trichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Vinyl acetate	NELAP	0.0172	0.043		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 2:28	93122
Xylenes, Total	NELAP	0.0009	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 2:28	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		111	%REC	1	10/26/2013 2:28	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		109.4	%REC	1	10/26/2013 2:28	93122
Surr: Dibromofluoromethane		0	77.7-120		105.5	%REC	1	10/26/2013 2:28	93122
Surr: Toluene-d8		0	86-116		89.5	%REC	1	10/26/2013 2:28	93122

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-008

Client Sample ID: 2396-3-B10

Matrix: SOLID

Collection Date: 10/22/2013 15:50

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	10/24/2013 16:32	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		89	%	1	10/24/2013 16:32	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.24		1	10/24/2013 20:56	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 10:36	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.109	mg/L	1	10/28/2013 15:47	93084
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/28/2013 15:47	93084
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 15:47	93084
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 15:47	93084
Chromium	NELAP	0.004	0.01	J	0.0095	mg/L	1	10/28/2013 15:47	93084
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/28/2013 15:47	93084
Iron	NELAP	0.007	0.02	X	7.38	mg/L	1	10/28/2013 15:47	93084
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 15:47	93084
Manganese	NELAP	0.0016	0.005		0.0279	mg/L	1	10/28/2013 15:47	93084
Nickel	NELAP	0.0033	0.01	J	0.0051	mg/L	1	10/28/2013 15:47	93084
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 15:47	93084
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 15:47	93084
Zinc	NELAP	0.0021	0.01		0.0198	mg/L	1	10/28/2013 15:47	93084
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	10/29/2013 19:57	93086
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 10:02	93086
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 13:58	93093
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/28/2013 18:48	93064
Arsenic	NELAP	1.18	2.36		6.44	mg/Kg-dry	1	10/25/2013 13:51	93050
Barium	NELAP	0.24	0.47		105	mg/Kg-dry	1	10/25/2013 13:51	93050
Beryllium	NELAP	0.05	0.09		0.6	mg/Kg-dry	1	10/25/2013 13:51	93050
Boron	NELAP	0.94	1.89		10.6	mg/Kg-dry	1	10/25/2013 13:51	93050
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	10/25/2013 13:51	93050
Calcium	NELAP	2.36	4.72		51100	mg/Kg-dry	1	10/25/2013 13:51	93050
Chromium	NELAP	0.47	0.94	X	19.2	mg/Kg-dry	1	10/25/2013 13:51	93050
Cobalt	NELAP	0.47	0.94		8.09	mg/Kg-dry	1	10/25/2013 13:51	93050
Copper	NELAP	0.47	0.94		16.8	mg/Kg-dry	1	10/25/2013 13:51	93050
Iron	NELAP	0.94	1.89	X	18500	mg/Kg-dry	1	10/25/2013 13:51	93050
Lead	NELAP	1.89	3.77		9.4	mg/Kg-dry	1	10/25/2013 13:51	93050
Magnesium	NELAP	0.47	0.94		25300	mg/Kg-dry	1	10/25/2013 13:51	93050
Manganese	NELAP	0.24	0.47		504	mg/Kg-dry	1	10/25/2013 13:51	93050
Nickel	NELAP	0.47	0.94		19.1	mg/Kg-dry	1	10/25/2013 13:51	93050
Potassium	NELAP	4.72	9.43		1810	mg/Kg-dry	1	10/25/2013 13:51	93050
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	10/25/2013 13:51	93050
Sodium	NELAP	2.36	4.72		433	mg/Kg-dry	1	10/25/2013 13:51	93050
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	10/25/2013 13:51	93050



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-008

Client Sample ID: 2396-3-B10

Matrix: SOLID

Collection Date: 10/22/2013 15:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.47	0.94		31.8	mg/Kg-dry	1	10/25/2013 13:51	93050
Zinc	NELAP	0.47	0.94		35.6	mg/Kg-dry	1	10/25/2013 13:51	93050
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.337	0.577		< 0.577	mg/Kg-dry	1	10/29/2013 10:15	93058
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.021	mg/Kg-dry	1	10/25/2013 9:34	93035
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.149	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
1,2-Dichlorobenzene	NELAP	0.178	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
1,3-Dichlorobenzene	NELAP	0.188	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
1,4-Dichlorobenzene	NELAP	0.178	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
2,4,5-Trichlorophenol	NELAP	0.107	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
2,4,6-Trichlorophenol	NELAP	0.141	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
2,4-Dichlorophenol	NELAP	0.136	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
2,4-Dimethylphenol	NELAP	0.142	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
2,4-Dinitrophenol	NELAP	0.12	1.12		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
2,4-Dinitrotoluene	NELAP	0.117	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
2,6-Dinitrotoluene	NELAP	0.121	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
2-Chloronaphthalene	NELAP	0.135	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
2-Chlorophenol	NELAP	0.142	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
2-Methylnaphthalene	NELAP	0.134	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
2-Nitroaniline	NELAP	0.102	1.12		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
2-Nitrophenol	NELAP	0.126	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
3,3'-Dichlorobenzidine	NELAP	0.224	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
3-Nitroaniline	NELAP	0.092	1.12		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
4,6-Dinitro-2-methylphenol	NELAP	0.121	1.12		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
4-Bromophenyl phenyl ether	NELAP	0.103	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
4-Chloro-3-methylphenol	NELAP	0.123	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
4-Chloroaniline	NELAP	0.136	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
4-Chlorophenyl phenyl ether	NELAP	0.111	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
4-Nitroaniline	NELAP	0.102	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
4-Nitrophenol	NELAP	0.11	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Acenaphthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Acenaphthylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Benzo(a)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Benzo(a)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Benzo(b)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Benzo(g,h,i)perylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Benzo(k)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Bis(2-chloroethoxy)methane	NELAP	0.131	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Bis(2-chloroethyl)ether	NELAP	0.159	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Bis(2-chloroisopropyl)ether	NELAP	0.128	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Bis(2-ethylhexyl)phthalate	NELAP	0.131	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Butyl benzyl phthalate	NELAP	0.113	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Carbazole		0.137	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Chrysene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-008

Client Sample ID: 2396-3-B10

Matrix: SOLID

Collection Date: 10/22/2013 15:50

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	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Dibenzofuran	NELAP	0.141	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Diethyl phthalate	NELAP	0.108	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Dimethyl phthalate	NELAP	0.102	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Di-n-butyl phthalate	NELAP	0.116	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Di-n-octyl phthalate	NELAP	0.117	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Fluorene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Hexachlorobenzene	NELAP	0.11	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Hexachlorobutadiene	NELAP	0.174	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Hexachlorocyclopentadiene	NELAP	0.114	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Hexachloroethane	NELAP	0.187	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Isophorone	NELAP	0.132	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
m,p-Cresol	NELAP	0.141	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Naphthalene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Nitrobenzene	NELAP	0.14	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
N-Nitroso-di-n-propylamine	NELAP	0.123	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
N-Nitrosodiphenylamine	NELAP	0.103	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
o-Cresol	NELAP	0.132	0.561		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Pentachlorophenol	NELAP	0.741	2.24		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Phenanthrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Phenol	NELAP	0.13	0.393		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/29/2013 17:49	93101
Surr: 2,4,6-Tribromophenol		0	32.7-130		68.7	%REC	1	10/29/2013 17:49	93101
Surr: 2-Fluorobiphenyl		0	34.1-116		66.3	%REC	1	10/29/2013 17:49	93101
Surr: 2-Fluorophenol		0	30.5-99		67.7	%REC	1	10/29/2013 17:49	93101
Surr: Nitrobenzene-d5		0	34.1-101		64	%REC	1	10/29/2013 17:49	93101
Surr: Phenol-d5		0	34.9-110		77.9	%REC	1	10/29/2013 17:49	93101
Surr: p-Terphenyl-d14		0	41.7-124		80.2	%REC	1	10/29/2013 17:49	93101
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
1,1,1,2-Tetrachloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
1,1,2-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
1,1-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
1,1-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
1,2-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
1,2-Dichloropropane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
1,3-Dichloropropene, Total		0.0009	0.003		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
2-Butanone	NELAP	0.0087	0.043		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
2-Hexanone	NELAP	0.0087	0.043		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
4-Methyl-2-pentanone	NELAP	0.0087	0.043		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Acetone	NELAP	0.0087	0.043	J	0.021	mg/Kg-dry	1	10/26/2013 2:55	93122
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Bromodichloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Bromoform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Bromomethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/26/2013 2:55	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-008

Client Sample ID: 2396-3-B10

Matrix: SOLID

Collection Date: 10/22/2013 15:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbon disulfide	NELAP	0.0026	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Carbon tetrachloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Chlorobenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Chloroethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Chloroform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Chloromethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
cis-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
cis-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Dibromochloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Ethylbenzene	NELAP	0.0009	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 2:55	93122
m,p-Xylenes	NELAP	0.0009	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 2:55	93122
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Methylene chloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
o-Xylene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Styrene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Tetrachloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Toluene	NELAP	0.0009	0.004	J	0.002	mg/Kg-dry	1	10/26/2013 2:55	93122
trans-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
trans-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Trichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Vinyl acetate	NELAP	0.0174	0.043		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 2:55	93122
Xylenes, Total	NELAP	0.0009	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 2:55	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		108.7	%REC	1	10/26/2013 2:55	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		108.9	%REC	1	10/26/2013 2:55	93122
Surr: Dibromofluoromethane		0	77.7-120		105.9	%REC	1	10/26/2013 2:55	93122
Surr: Toluene-d8		0	86-116		90.1	%REC	1	10/26/2013 2:55	93122

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-009

Client Sample ID: 2396-3-B09

Matrix: SOLID

Collection Date: 10/22/2013 16:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		16.8	%	1	10/24/2013 16:32	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		83.2	%	1	10/24/2013 16:32	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.31		1	10/24/2013 20:59	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 10:40	93226
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/31/2013 10:40	93226
Manganese	NELAP	0.0016	0.005		0.747	mg/L	1	10/31/2013 10:40	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.04	0.1		0.325	mg/L	2	10/29/2013 9:08	93084
Beryllium	NELAP	0.0003	0.001		0.001	mg/L	1	10/28/2013 15:51	93084
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 15:51	93084
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 15:51	93084
Chromium	NELAP	0.008	0.02		0.05	mg/L	2	10/29/2013 9:08	93084
Cobalt	NELAP	0.0022	0.01	J	0.006	mg/L	1	10/28/2013 15:51	93084
Iron	NELAP	0.014	0.04	X	46.1	mg/L	2	10/29/2013 9:08	93084
Lead	NELAP	0.006	0.007	X	0.0095	mg/L	1	10/28/2013 15:51	93084
Manganese	NELAP	0.0032	0.01	X	0.238	mg/L	2	10/29/2013 9:08	93084
Nickel	NELAP	0.0066	0.02		0.0322	mg/L	2	10/29/2013 9:08	93084
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 15:51	93084
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 15:51	93084
Zinc	NELAP	0.0042	0.02		0.101	mg/L	2	10/29/2013 9:08	93084
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	10/29/2013 20:23	93086
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 10:05	93086
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002	J	0.00008	mg/L	1	10/28/2013 14:00	93093
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/28/2013 18:52	93064
Arsenic	NELAP	1.16	2.31		8.36	mg/Kg-dry	1	10/25/2013 13:57	93050
Barium	NELAP	0.23	0.46		135	mg/Kg-dry	1	10/25/2013 13:57	93050
Beryllium	NELAP	0.05	0.09		0.72	mg/Kg-dry	1	10/25/2013 13:57	93050
Boron	NELAP	0.93	1.85		7.82	mg/Kg-dry	1	10/25/2013 13:57	93050
Cadmium	NELAP	0.09	0.19	J	0.12	mg/Kg-dry	1	10/25/2013 13:57	93050
Calcium	NELAP	2.31	4.63		6940	mg/Kg-dry	1	10/25/2013 13:57	93050
Chromium	NELAP	0.46	0.93	X	24.4	mg/Kg-dry	1	10/25/2013 13:57	93050
Cobalt	NELAP	0.46	0.93		6.97	mg/Kg-dry	1	10/25/2013 13:57	93050
Copper	NELAP	0.46	0.93		18.3	mg/Kg-dry	1	10/25/2013 13:57	93050
Iron	NELAP	0.93	1.85	X	23300	mg/Kg-dry	1	10/25/2013 13:57	93050
Lead	NELAP	1.85	3.7		11.3	mg/Kg-dry	1	10/25/2013 13:57	93050
Magnesium	NELAP	0.46	0.93		5630	mg/Kg-dry	1	10/25/2013 13:57	93050
Manganese	NELAP	0.23	0.46		510	mg/Kg-dry	1	10/25/2013 13:57	93050
Nickel	NELAP	0.46	0.93		22	mg/Kg-dry	1	10/25/2013 13:57	93050
Potassium	NELAP	4.63	9.26		1300	mg/Kg-dry	1	10/25/2013 13:57	93050
Silver	NELAP	0.46	0.51		< 0.51	mg/Kg-dry	1	10/25/2013 13:57	93050

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-009

Client Sample ID: 2396-3-B09

Matrix: SOLID

Collection Date: 10/22/2013 16:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Sodium	NELAP	2.31	4.63		1120	mg/Kg-dry	1	10/25/2013 13:57	93050
Thallium	NELAP	2.31	2.41		< 2.41	mg/Kg-dry	1	10/25/2013 13:57	93050
Vanadium	NELAP	0.46	0.93		40.2	mg/Kg-dry	1	10/25/2013 13:57	93050
Zinc	NELAP	0.46	0.93		43.4	mg/Kg-dry	1	10/25/2013 13:57	93050
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.35	0.6		< 0.6	mg/Kg-dry	1	10/29/2013 10:19	93058
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.027	mg/Kg-dry	1	10/25/2013 9:36	93035
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.159	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
1,2-Dichlorobenzene	NELAP	0.19	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
1,3-Dichlorobenzene	NELAP	0.201	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
1,4-Dichlorobenzene	NELAP	0.19	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
2,4,5-Trichlorophenol	NELAP	0.114	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
2,4,6-Trichlorophenol	NELAP	0.151	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
2,4-Dichlorophenol	NELAP	0.145	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
2,4-Dimethylphenol	NELAP	0.152	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
2,4-Dinitrophenol	NELAP	0.128	1.2		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
2,4-Dinitrotoluene	NELAP	0.124	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
2,6-Dinitrotoluene	NELAP	0.129	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
2-Chloronaphthalene	NELAP	0.144	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
2-Chlorophenol	NELAP	0.152	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
2-Methylnaphthalene	NELAP	0.142	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
2-Nitroaniline	NELAP	0.109	1.2		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
2-Nitrophenol	NELAP	0.134	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
3,3'-Dichlorobenzidine	NELAP	0.239	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
3-Nitroaniline	NELAP	0.098	1.2		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
4,6-Dinitro-2-methylphenol	NELAP	0.129	1.2		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
4-Bromophenyl phenyl ether	NELAP	0.11	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
4-Chloro-3-methylphenol	NELAP	0.132	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
4-Chloroaniline	NELAP	0.145	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
4-Chlorophenyl phenyl ether	NELAP	0.118	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
4-Nitroaniline	NELAP	0.109	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
4-Nitrophenol	NELAP	0.117	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Acenaphthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Acenaphthylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Benzo(a)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Benzo(a)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Benzo(b)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Benzo(g,h,i)perylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Benzo(k)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Bis(2-chloroethoxy)methane	NELAP	0.14	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Bis(2-chloroethyl)ether	NELAP	0.17	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Bis(2-chloroisopropyl)ether	NELAP	0.136	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Bis(2-ethylhexyl)phthalate	NELAP	0.14	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Butyl benzyl phthalate	NELAP	0.121	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-009

Client Sample ID: 2396-3-B09

Matrix: SOLID

Collection Date: 10/22/2013 16:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbazole		0.146	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Chrysene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Dibenzo(a,h)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Dibenzofuran	NELAP	0.151	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Diethyl phthalate	NELAP	0.115	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Dimethyl phthalate	NELAP	0.109	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Di-n-butyl phthalate	NELAP	0.123	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Di-n-octyl phthalate	NELAP	0.124	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Fluorene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Hexachlorobenzene	NELAP	0.117	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Hexachlorobutadiene	NELAP	0.185	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Hexachlorocyclopentadiene	NELAP	0.122	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Hexachloroethane	NELAP	0.2	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Isophorone	NELAP	0.141	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
m,p-Cresol	NELAP	0.151	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Naphthalene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Nitrobenzene	NELAP	0.15	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
N-Nitroso-di-n-propylamine	NELAP	0.132	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
N-Nitrosodiphenylamine	NELAP	0.11	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
o-Cresol	NELAP	0.141	0.598		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Pentachlorophenol	NELAP	0.79	2.39		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Phenanthrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Phenol	NELAP	0.139	0.419		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/29/2013 18:22	93101
Surr: 2,4,6-Tribromophenol		0	32.7-130		72.5	%REC	1	10/29/2013 18:22	93101
Surr: 2-Fluorobiphenyl		0	34.1-116		69	%REC	1	10/29/2013 18:22	93101
Surr: 2-Fluorophenol		0	30.5-99		71.9	%REC	1	10/29/2013 18:22	93101
Surr: Nitrobenzene-d5		0	34.1-101		69.1	%REC	1	10/29/2013 18:22	93101
Surr: Phenol-d5		0	34.9-110		81.4	%REC	1	10/29/2013 18:22	93101
Surr: p-Terphenyl-d14		0	41.7-124		77.7	%REC	1	10/29/2013 18:22	93101

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
1,1,2,2-Tetrachloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
1,1,2-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
1,1-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
1,1-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
1,2-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
1,2-Dichloropropane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
1,3-Dichloropropene, Total		0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
2-Butanone	NELAP	0.0089	0.044		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
2-Hexanone	NELAP	0.0089	0.044		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
4-Methyl-2-pentanone	NELAP	0.0089	0.044		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Acetone	NELAP	0.0089	0.044	J	0.026	mg/Kg-dry	1	10/26/2013 3:21	93122
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Bromodichloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-009

Client Sample ID: 2396-3-B09

Matrix: SOLID

Collection Date: 10/22/2013 16:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromoform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Bromomethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Carbon disulfide	NELAP	0.0027	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Carbon tetrachloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Chlorobenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Chloroethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Chloroform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Chloromethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
cis-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
cis-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Dibromochloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Ethylbenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
m,p-Xylenes	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Methylene chloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
o-Xylene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Styrene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Tetrachloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Toluene	NELAP	0.0009	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 3:21	93122
trans-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
trans-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Trichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Vinyl acetate	NELAP	0.0178	0.044		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Xylenes, Total	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 3:21	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		111.6	%REC	1	10/26/2013 3:21	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		109.1	%REC	1	10/26/2013 3:21	93122
Surr: Dibromofluoromethane		0	77.7-120		106.8	%REC	1	10/26/2013 3:21	93122
Surr: Toluene-d8		0	86-116		91.4	%REC	1	10/26/2013 3:21	93122

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-011

Client Sample ID: 2396-3-B07

Matrix: SOLID

Collection Date: 10/22/2013 16:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		16.9	%	1	10/24/2013 16:33	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		83.1	%	1	10/24/2013 16:33	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.21		1	10/24/2013 21:05	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 10:47	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0518	mg/L	1	10/28/2013 15:59	93084
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/28/2013 15:59	93084
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 15:59	93084
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 15:59	93084
Chromium	NELAP	0.004	0.01	J	0.0091	mg/L	1	10/28/2013 15:59	93084
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/28/2013 15:59	93084
Iron	NELAP	0.007	0.02	X	5.38	mg/L	1	10/28/2013 15:59	93084
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 15:59	93084
Manganese	NELAP	0.0016	0.005		0.0337	mg/L	1	10/28/2013 15:59	93084
Nickel	NELAP	0.0033	0.01	J	0.0041	mg/L	1	10/28/2013 15:59	93084
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 15:59	93084
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 15:59	93084
Zinc	NELAP	0.0021	0.01		0.0146	mg/L	1	10/28/2013 15:59	93084
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	10/29/2013 20:30	93086
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 10:12	93086
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 14:05	93093
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/28/2013 18:59	93064
Arsenic	NELAP	1.2	2.4		8.1	mg/Kg-dry	1	10/25/2013 14:40	93050
Barium	NELAP	0.24	0.48		133	mg/Kg-dry	1	10/25/2013 14:40	93050
Beryllium	NELAP	0.05	0.1		0.85	mg/Kg-dry	1	10/25/2013 14:40	93050
Boron	NELAP	0.96	1.92		8.17	mg/Kg-dry	1	10/25/2013 14:40	93050
Cadmium	NELAP	0.1	0.19		< 0.19	mg/Kg-dry	1	10/25/2013 14:40	93050
Calcium	NELAP	2.4	4.81		8540	mg/Kg-dry	1	10/25/2013 14:40	93050
Chromium	NELAP	0.48	0.96	X	25.1	mg/Kg-dry	1	10/25/2013 14:40	93050
Cobalt	NELAP	0.48	0.96		6.05	mg/Kg-dry	1	10/25/2013 14:40	93050
Copper	NELAP	0.48	0.96		17.5	mg/Kg-dry	1	10/25/2013 14:40	93050
Iron	NELAP	0.96	1.92	X	24400	mg/Kg-dry	1	10/25/2013 14:40	93050
Lead	NELAP	1.92	3.85		11.2	mg/Kg-dry	1	10/25/2013 14:40	93050
Magnesium	NELAP	0.48	0.96		6900	mg/Kg-dry	1	10/25/2013 14:40	93050
Manganese	NELAP	0.24	0.48		359	mg/Kg-dry	1	10/25/2013 14:40	93050
Nickel	NELAP	0.48	0.96		19.9	mg/Kg-dry	1	10/25/2013 14:40	93050
Potassium	NELAP	4.81	9.62		1570	mg/Kg-dry	1	10/25/2013 14:40	93050
Silver	NELAP	0.48	0.53		< 0.53	mg/Kg-dry	1	10/25/2013 14:40	93050
Sodium	NELAP	2.4	4.81		894	mg/Kg-dry	1	10/25/2013 14:40	93050
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	10/25/2013 14:40	93050

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-011

Client Sample ID: 2396-3-B07

Matrix: SOLID

Collection Date: 10/22/2013 16:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.48	0.96		42.3	mg/Kg-dry	1	10/25/2013 14:40	93050
Zinc	NELAP	0.48	0.96		51	mg/Kg-dry	1	10/25/2013 14:40	93050
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.324	0.556		< 0.556	mg/Kg-dry	1	10/29/2013 10:32	93058
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.029	mg/Kg-dry	1	10/25/2013 9:41	93035
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.158	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
1,2-Dichlorobenzene	NELAP	0.189	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
1,3-Dichlorobenzene	NELAP	0.2	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
1,4-Dichlorobenzene	NELAP	0.189	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
2,4,5-Trichlorophenol	NELAP	0.113	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
2,4,6-Trichlorophenol	NELAP	0.15	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
2,4-Dichlorophenol	NELAP	0.144	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
2,4-Dimethylphenol	NELAP	0.151	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
2,4-Dinitrophenol	NELAP	0.127	1.19		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
2,4-Dinitrotoluene	NELAP	0.124	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
2,6-Dinitrotoluene	NELAP	0.128	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
2-Chloronaphthalene	NELAP	0.143	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
2-Chlorophenol	NELAP	0.151	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
2-Methylnaphthalene	NELAP	0.142	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
2-Nitroaniline	NELAP	0.108	1.19		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
2-Nitrophenol	NELAP	0.133	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
3,3'-Dichlorobenzidine	NELAP	0.238	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
3-Nitroaniline	NELAP	0.098	1.19		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
4,6-Dinitro-2-methylphenol	NELAP	0.128	1.19		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
4-Bromophenyl phenyl ether	NELAP	0.109	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
4-Chloro-3-methylphenol	NELAP	0.131	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
4-Chloroaniline	NELAP	0.144	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
4-Chlorophenyl phenyl ether	NELAP	0.118	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
4-Nitroaniline	NELAP	0.108	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
4-Nitrophenol	NELAP	0.117	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Acenaphthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Acenaphthylene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Anthracene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Benzo(a)anthracene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Benzo(a)pyrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Benzo(b)fluoranthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Benzo(g,h,i)perylene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Benzo(k)fluoranthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Bis(2-chloroethoxy)methane	NELAP	0.139	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Bis(2-chloroethyl)ether	NELAP	0.169	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Bis(2-chloroisopropyl)ether	NELAP	0.136	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Bis(2-ethylhexyl)phthalate	NELAP	0.139	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Butyl benzyl phthalate	NELAP	0.12	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Carbazole		0.145	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Chrysene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-011

Client Sample ID: 2396-3-B07

Matrix: SOLID

Collection Date: 10/22/2013 16:35

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	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Dibenzofuran	NELAP	0.15	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Diethyl phthalate	NELAP	0.114	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Dimethyl phthalate	NELAP	0.108	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Di-n-butyl phthalate	NELAP	0.122	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Di-n-octyl phthalate	NELAP	0.124	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Fluoranthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Fluorene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Hexachlorobenzene	NELAP	0.117	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Hexachlorobutadiene	NELAP	0.184	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Hexachlorocyclopentadiene	NELAP	0.121	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Hexachloroethane	NELAP	0.199	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Isophorone	NELAP	0.14	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
m,p-Cresol	NELAP	0.15	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Naphthalene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Nitrobenzene	NELAP	0.149	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
N-Nitroso-di-n-propylamine	NELAP	0.131	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
N-Nitrosodiphenylamine	NELAP	0.109	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
o-Cresol	NELAP	0.14	0.595		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Pentachlorophenol	NELAP	0.785	2.38		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Phenanthrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Phenol	NELAP	0.138	0.416		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Pyrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/29/2013 19:29	93101
Surr: 2,4,6-Tribromophenol		0	32.7-130		71.8	%REC	1	10/29/2013 19:29	93101
Surr: 2-Fluorobiphenyl		0	34.1-116		72.7	%REC	1	10/29/2013 19:29	93101
Surr: 2-Fluorophenol		0	30.5-99		75	%REC	1	10/29/2013 19:29	93101
Surr: Nitrobenzene-d5		0	34.1-101		70.9	%REC	1	10/29/2013 19:29	93101
Surr: Phenol-d5		0	34.9-110		84	%REC	1	10/29/2013 19:29	93101
Surr: p-Terphenyl-d14		0	41.7-124		78.8	%REC	1	10/29/2013 19:29	93101
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
1,1,2,2-Tetrachloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
1,1,2-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
1,1-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
1,1-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
1,2-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
1,2-Dichloropropane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
1,3-Dichloropropene, Total		0.001	0.004		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
2-Butanone	NELAP	0.0095	0.048		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
2-Hexanone	NELAP	0.0095	0.048		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
4-Methyl-2-pentanone	NELAP	0.0095	0.048		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Acetone	NELAP	0.0095	0.048	J	0.03	mg/Kg-dry	1	10/26/2013 4:13	93122
Benzene	NELAP	0.0005	0.001		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Bromodichloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Bromoform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Bromomethane	NELAP	0.0019	0.01		ND	mg/Kg-dry	1	10/26/2013 4:13	93122

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-011

Client Sample ID: 2396-3-B07

Matrix: SOLID

Collection Date: 10/22/2013 16:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbon disulfide	NELAP	0.0029	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Carbon tetrachloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Chlorobenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Chloroethane	NELAP	0.0019	0.01		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Chloroform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Chloromethane	NELAP	0.0019	0.01		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
cis-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
cis-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Dibromochloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Ethylbenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
m,p-Xylenes	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Methylene chloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
o-Xylene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Styrene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Tetrachloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Toluene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
trans-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
trans-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Trichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Vinyl acetate	NELAP	0.019	0.048		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Xylenes, Total	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/26/2013 4:13	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		113.1	%REC	1	10/26/2013 4:13	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		107.6	%REC	1	10/26/2013 4:13	93122
Surr: Dibromofluoromethane		0	77.7-120		106.2	%REC	1	10/26/2013 4:13	93122
Surr: Toluene-d8		0	86-116		91.3	%REC	1	10/26/2013 4:13	93122

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-012

Client Sample ID: 2396-3-B07 DUP

Matrix: SOLID

Collection Date: 10/22/2013 16:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		14.7	%	1	10/24/2013 16:33	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		85.3	%	1	10/24/2013 16:33	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		8		1	10/24/2013 21:08	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 10:51	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0491	mg/L	1	10/28/2013 16:02	93084
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/28/2013 16:02	93084
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 16:02	93084
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 16:02	93084
Chromium	NELAP	0.004	0.01		0.0145	mg/L	1	10/28/2013 16:02	93084
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/28/2013 16:02	93084
Iron	NELAP	0.007	0.02	X	7.09	mg/L	1	10/28/2013 16:02	93084
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 16:02	93084
Manganese	NELAP	0.0016	0.005		0.0387	mg/L	1	10/28/2013 16:02	93084
Nickel	NELAP	0.0033	0.01	J	0.0057	mg/L	1	10/28/2013 16:02	93084
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 16:02	93084
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 16:02	93084
Zinc	NELAP	0.0021	0.01		0.0201	mg/L	1	10/28/2013 16:02	93084
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	10/29/2013 20:34	93086
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 10:15	93086
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 14:29	93093
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.55	4.9		< 4.9	mg/Kg-dry	1	10/28/2013 19:03	93064
Arsenic	NELAP	1.25	2.5		5.7	mg/Kg-dry	1	10/25/2013 14:46	93050
Barium	NELAP	0.25	0.5		154	mg/Kg-dry	1	10/25/2013 14:46	93050
Beryllium	NELAP	0.05	0.1		0.71	mg/Kg-dry	1	10/25/2013 14:46	93050
Boron	NELAP	1	2		10.4	mg/Kg-dry	1	10/25/2013 14:46	93050
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	10/25/2013 14:46	93050
Calcium	NELAP	2.5	5		21700	mg/Kg-dry	1	10/25/2013 14:46	93050
Chromium	NELAP	0.5	1	X	21.5	mg/Kg-dry	1	10/25/2013 14:46	93050
Cobalt	NELAP	0.5	1		7.21	mg/Kg-dry	1	10/25/2013 14:46	93050
Copper	NELAP	0.5	1		15	mg/Kg-dry	1	10/25/2013 14:46	93050
Iron	NELAP	1	2	X	20700	mg/Kg-dry	1	10/25/2013 14:46	93050
Lead	NELAP	2	4		10.3	mg/Kg-dry	1	10/25/2013 14:46	93050
Magnesium	NELAP	0.5	1		13500	mg/Kg-dry	1	10/25/2013 14:46	93050
Manganese	NELAP	0.25	0.5		508	mg/Kg-dry	1	10/25/2013 14:46	93050
Nickel	NELAP	0.5	1		18.5	mg/Kg-dry	1	10/25/2013 14:46	93050
Potassium	NELAP	5	10		1540	mg/Kg-dry	1	10/25/2013 14:46	93050
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	10/25/2013 14:46	93050
Sodium	NELAP	2.5	5		797	mg/Kg-dry	1	10/25/2013 14:46	93050
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	10/25/2013 14:46	93050

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-012

Client Sample ID: 2396-3-B07 DUP

Matrix: SOLID

Collection Date: 10/22/2013 16:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.5	1		36.4	mg/Kg-dry	1	10/25/2013 14:46	93050
Zinc	NELAP	0.5	1		43.4	mg/Kg-dry	1	10/25/2013 14:46	93050
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.33	0.566		< 0.566	mg/Kg-dry	1	10/29/2013 10:36	93058
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.012	mg/Kg-dry	1	10/25/2013 9:43	93035
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.154	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
1,2-Dichlorobenzene	NELAP	0.185	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
1,3-Dichlorobenzene	NELAP	0.195	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
1,4-Dichlorobenzene	NELAP	0.185	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
2,4,5-Trichlorophenol	NELAP	0.11	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
2,4,6-Trichlorophenol	NELAP	0.146	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
2,4-Dichlorophenol	NELAP	0.141	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
2,4-Dimethylphenol	NELAP	0.147	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
2,4-Dinitrophenol	NELAP	0.124	1.16		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
2,4-Dinitrotoluene	NELAP	0.121	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
2,6-Dinitrotoluene	NELAP	0.125	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
2-Chloronaphthalene	NELAP	0.139	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
2-Chlorophenol	NELAP	0.147	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
2-Methylnaphthalene	NELAP	0.138	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
2-Nitroaniline	NELAP	0.106	1.16		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
2-Nitrophenol	NELAP	0.13	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
3,3'-Dichlorobenzidine	NELAP	0.232	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
3-Nitroaniline	NELAP	0.095	1.16		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
4,6-Dinitro-2-methylphenol	NELAP	0.125	1.16		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
4-Bromophenyl phenyl ether	NELAP	0.107	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
4-Chloro-3-methylphenol	NELAP	0.128	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
4-Chloroaniline	NELAP	0.141	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
4-Chlorophenyl phenyl ether	NELAP	0.115	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
4-Nitroaniline	NELAP	0.106	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
4-Nitrophenol	NELAP	0.114	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Acenaphthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Acenaphthylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Benzo(a)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Benzo(a)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Benzo(b)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Benzo(g,h,i)perylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Benzo(k)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Bis(2-chloroethoxy)methane	NELAP	0.136	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Bis(2-chloroethyl)ether	NELAP	0.165	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Bis(2-chloroisopropyl)ether	NELAP	0.132	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Bis(2-ethylhexyl)phthalate	NELAP	0.136	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Butyl benzyl phthalate	NELAP	0.117	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Carbazole		0.142	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Chrysene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-012

Client Sample ID: 2396-3-B07 DUP

Matrix: SOLID

Collection Date: 10/22/2013 16:35

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	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Dibenzofuran	NELAP	0.146	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Diethyl phthalate	NELAP	0.111	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Dimethyl phthalate	NELAP	0.106	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Di-n-butyl phthalate	NELAP	0.12	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Di-n-octyl phthalate	NELAP	0.121	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Fluorene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Hexachlorobenzene	NELAP	0.114	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Hexachlorobutadiene	NELAP	0.18	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Hexachlorocyclopentadiene	NELAP	0.118	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Hexachloroethane	NELAP	0.194	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Isophorone	NELAP	0.137	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
m,p-Cresol	NELAP	0.146	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Naphthalene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Nitrobenzene	NELAP	0.145	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
N-Nitroso-di-n-propylamine	NELAP	0.128	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
N-Nitrosodiphenylamine	NELAP	0.107	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
o-Cresol	NELAP	0.137	0.581		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Pentachlorophenol	NELAP	0.766	2.32		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Phenanthrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Phenol	NELAP	0.135	0.406		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 20:03	93101
Surr: 2,4,6-Tribromophenol		0	32.7-130		72.4	%REC	1	10/29/2013 20:03	93101
Surr: 2-Fluorobiphenyl		0	34.1-116		73	%REC	1	10/29/2013 20:03	93101
Surr: 2-Fluorophenol		0	30.5-99		74.8	%REC	1	10/29/2013 20:03	93101
Surr: Nitrobenzene-d5		0	34.1-101		71.2	%REC	1	10/29/2013 20:03	93101
Surr: Phenol-d5		0	34.9-110		85.5	%REC	1	10/29/2013 20:03	93101
Surr: p-Terphenyl-d14		0	41.7-124		79.4	%REC	1	10/29/2013 20:03	93101
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
2-Butanone	NELAP	0.0083	0.042		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
2-Hexanone	NELAP	0.0083	0.042		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
4-Methyl-2-pentanone	NELAP	0.0083	0.042		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Acetone	NELAP	0.0083	0.042	J	0.021	mg/Kg-dry	1	10/26/2013 4:40	93122
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Bromomethane	NELAP	0.0017	0.008		ND	mg/Kg-dry	1	10/26/2013 4:40	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101214

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101214-012

Client Sample ID: 2396-3-B07 DUP

Matrix: SOLID

Collection Date: 10/22/2013 16:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbon disulfide	NELAP	0.0025	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Chloroethane	NELAP	0.0017	0.008		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Chloromethane	NELAP	0.0017	0.008		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Ethylbenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
m,p-Xylenes	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Toluene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Vinyl acetate	NELAP	0.0167	0.042		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Xylenes, Total	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 4:40	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		112.2	%REC	1	10/26/2013 4:40	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		108.7	%REC	1	10/26/2013 4:40	93122
Surr: Dibromofluoromethane		0	77.7-120		107.2	%REC	1	10/26/2013 4:40	93122
Surr: Toluene-d8		0	86-116		91.5	%REC	1	10/26/2013 4:40	93122



CHAIN OF CUSTODY RECORD

1012

Client Contact		Laboratory		Project Name: US Rt 20 Kane Co		COC No.: 811 10/24/13														
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 No.: IDOT 2013-033		Lab Job No.: 13101214														
Special Instructions:				TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD Other		Sample Temp: 2.4														
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.				Sampler: SR SR BG		Matrix Key: W: Water S: Soil SL: Sludge S: Sediment L: Leachate DW: Drinking Water OL: Oil O: Other														
				ANALYSES		Comments														
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					
13101214-001	2396-3-B12	10/22/13	15:20	S	X	X					X	X	X	X					13101214-001	
002	2396-3-B13		15:05																	
003	2396-3-B14		14:50																	
004	2396-3-B15		14:35																	
005	2396-3-B16		14:10																	
006	2396-3-B17	10/22/13	14:00	S	X	X					X	X	X	X						
	2396-3-B18																			
	2396-3-B18-DUP																			
	2396-3-B19																			
	2396-3-B20																			
	2396-3-B21																			
	2396-3-B22																			
Relinquished by:					X	X					X	X	X	X						
				S	X	X					X	X	X	X						
Date/Time					10/22	1650														10/22/13 1455
Relinquished by:																				10/24/13 0505
Date/Time																				10/24/13 0505
Relinquished by:																				
Date/Time																				

FD/Ex



CHAIN OF CUSTODY RECORD

2012

Client Contact Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com		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: <u>US Rt 20 Kane Co</u> Project No.: <u>IDOT 2013-033</u> TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other		COC No.: <u>811 102413</u> Lab Job No.: <u>1310214</u> Sample Temp:											
Special Instructions: See Table 2 for complete parameter lists and minimum reporting limits. * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal. ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.				Matrix Key: W: Water S: Soil SL: Sludge S: Sediment L: Leachate DW: Drinking Water OL: Oil O: Other													
		ANALYSES															
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BETX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids	Waste Characterization	Comments	
1310214 007	2396-3-B11	10/22/13	1535	S	X	X					X	X	X	X			
008	2396-3-B10		1550														
009	2396-3-B09		1605														
010	2396-3-B06		1615														
011	2396-3-B07		1635														
012	2396-3-B07 DUP	10/22/13	1635	S	X	X					X	X	X	X			
 013 014 015 016 017 018 019 020 021 022 023 024 025 026 027 028 029 030 031 032 033 034 035 036 037 038 039 040 041 042 043 044 045 046 047 048 049 050 051 052 053 054 055 056 057 058 059 060 061 062 063 064 065 066 067 068 069 070 071 072 073 074 075 076 077 078 079 080 081 082 083 084 085 086 087 088 089 090 091 092 093 094 095 096 097 098 099 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 																	
Relinquished by: <u>[Signature]</u>		Date/Time: <u>10/22/13 1650</u>		Received by: <u>[Signature]</u>		Date/Time: <u>10-22-13 1055</u>											
Relinquished by: <u>[Signature]</u>		Date/Time: <u>10-23-13 0930</u>		Received by: <u>[Signature]</u>		Date/Time: <u>10-23-13 1055</u>											
Relinquished by: <u>[Signature]</u>		Date/Time: <u>10-23-13 0930</u>		Received by: <u>[Signature]</u>		Date/Time: <u>10-23-13 1055</u>											

November 05, 2013

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



RE: IDOT2013-033

WorkOrder: 13101297

Dear Colleen Grey:

TEKLAB, INC received 19 samples on 10/25/2013 9:10:00 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
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

This reporting package includes the following:

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Chain of Custody	Appended

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

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: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Cooler Receipt Temp: 2.4 °C

Locations and Accreditations

	<u>Collinsville</u>	<u>Springfield</u>	<u>Kansas City</u>	<u>Collinsville Air</u>
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	3920 Pintail Dr Springfield, IL 62711-9415	8421 Nieman Road Lenexa, KS 66214	5445 Horseshoe Lake Road 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

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



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-001

Client Sample ID: 2396-3-B25

Matrix: SOLID

Collection Date: 10/23/2013 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		8.5	%	1	10/25/2013 15:04	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		91.5	%	1	10/25/2013 15:04	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.37		1	10/25/2013 18:54	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	11/01/2013 11:54	93269
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.11	mg/L	1	10/29/2013 15:33	93140
Beryllium	NELAP	0.0003	0.001	J	0.0003	mg/L	1	10/29/2013 15:33	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 15:33	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 15:33	93140
Chromium	NELAP	0.004	0.01		0.0133	mg/L	1	10/29/2013 15:33	93140
Cobalt	NELAP	0.0022	0.01	J	0.0025	mg/L	1	10/29/2013 15:33	93140
Iron	NELAP	0.007	0.02	X	10.6	mg/L	1	10/29/2013 15:33	93140
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 15:33	93140
Manganese	NELAP	0.0016	0.005		0.0796	mg/L	1	10/29/2013 15:33	93140
Nickel	NELAP	0.0033	0.01	J	0.0098	mg/L	1	10/29/2013 15:33	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 15:33	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 15:33	93140
Zinc	NELAP	0.0021	0.01		0.0306	mg/L	1	10/29/2013 15:33	93140
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	10/30/2013 10:56	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/29/2013 16:40	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 14:09	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.41	4.63		< 4.63	mg/Kg-dry	1	10/29/2013 20:09	93105
Arsenic	NELAP	1.2	2.4		4.77	mg/Kg-dry	1	10/29/2013 14:33	93103
Barium	NELAP	0.24	0.48		39	mg/Kg-dry	1	10/29/2013 14:33	93103
Beryllium	NELAP	0.05	0.1		0.39	mg/Kg-dry	1	10/29/2013 14:33	93103
Boron	NELAP	0.96	1.92		9.75	mg/Kg-dry	1	10/29/2013 14:33	93103
Cadmium	NELAP	0.1	0.19		< 0.19	mg/Kg-dry	1	10/29/2013 14:33	93103
Calcium	NELAP	2.4	4.81		92600	mg/Kg-dry	1	10/29/2013 14:33	93103
Chromium	NELAP	0.48	0.96	X	13.2	mg/Kg-dry	1	10/29/2013 14:33	93103
Cobalt	NELAP	0.48	0.96		4.69	mg/Kg-dry	1	10/29/2013 14:33	93103
Copper	NELAP	0.48	0.96		12.5	mg/Kg-dry	1	10/29/2013 14:33	93103
Iron	NELAP	0.96	1.92		12900	mg/Kg-dry	1	10/29/2013 14:33	93103
Lead	NELAP	1.92	3.85		5.59	mg/Kg-dry	1	10/29/2013 14:33	93103
Magnesium	NELAP	0.48	0.96		39200	mg/Kg-dry	1	10/29/2013 14:33	93103
Manganese	NELAP	0.24	0.48		310	mg/Kg-dry	1	10/29/2013 14:33	93103
Nickel	NELAP	0.48	0.96		12.6	mg/Kg-dry	1	10/29/2013 14:33	93103
Potassium	NELAP	4.81	9.62		2400	mg/Kg-dry	1	10/29/2013 14:33	93103
Silver	NELAP	0.48	0.53		< 0.53	mg/Kg-dry	1	10/29/2013 14:33	93103
Sodium	NELAP	2.4	4.81		174	mg/Kg-dry	1	10/29/2013 14:33	93103
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	10/29/2013 14:33	93103

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-001

Client Sample ID: 2396-3-B25

Matrix: SOLID

Collection Date: 10/23/2013 10:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.48	0.96		19.5	mg/Kg-dry	1	10/29/2013 14:33	93103
Zinc	NELAP	0.48	0.96		33.3	mg/Kg-dry	1	10/29/2013 14:33	93103
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.35	0.6		< 0.6	mg/Kg-dry	1	10/31/2013 15:44	93104
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.014	mg/Kg-dry	1	10/28/2013 10:13	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.145	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
1,2-Dichlorobenzene	NELAP	0.174	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
1,3-Dichlorobenzene	NELAP	0.184	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
1,4-Dichlorobenzene	NELAP	0.174	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
2,4,5-Trichlorophenol	NELAP	0.104	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
2,4,6-Trichlorophenol	NELAP	0.138	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
2,4-Dichlorophenol	NELAP	0.132	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
2,4-Dimethylphenol	NELAP	0.139	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
2,4-Dinitrophenol	NELAP	0.117	1.09		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
2,4-Dinitrotoluene	NELAP	0.114	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
2,6-Dinitrotoluene	NELAP	0.118	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
2-Chloronaphthalene	NELAP	0.131	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
2-Chlorophenol	NELAP	0.139	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
2-Methylnaphthalene	NELAP	0.13	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
2-Nitroaniline	NELAP	0.099	1.09		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
2-Nitrophenol	NELAP	0.122	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
3,3'-Dichlorobenzidine	NELAP	0.219	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
3-Nitroaniline	NELAP	0.09	1.09		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
4,6-Dinitro-2-methylphenol	NELAP	0.118	1.09		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
4-Bromophenyl phenyl ether	NELAP	0.101	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
4-Chloro-3-methylphenol	NELAP	0.12	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
4-Chloroaniline	NELAP	0.132	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
4-Chlorophenyl phenyl ether	NELAP	0.108	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
4-Nitroaniline	NELAP	0.099	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
4-Nitrophenol	NELAP	0.107	0.383	S	ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Acenaphthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Acenaphthylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Benzo(a)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Benzo(a)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Benzo(b)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Benzo(g,h,i)perylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Benzo(k)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Bis(2-chloroethoxy)methane	NELAP	0.128	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Bis(2-chloroethyl)ether	NELAP	0.155	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Bis(2-chloroisopropyl)ether	NELAP	0.125	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.128	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Butyl benzyl phthalate	NELAP	0.11	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Carbazole		0.133	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Chrysene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-001

Client Sample ID: 2396-3-B25

Matrix: SOLID

Collection Date: 10/23/2013 10:30

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	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Dibenzofuran	NELAP	0.138	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Diethyl phthalate	NELAP	0.105	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Dimethyl phthalate	NELAP	0.099	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Di-n-butyl phthalate	NELAP	0.113	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Di-n-octyl phthalate	NELAP	0.114	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Fluorene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Hexachlorobenzene	NELAP	0.107	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Hexachlorobutadiene	NELAP	0.169	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Hexachlorocyclopentadiene	NELAP	0.111	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Hexachloroethane	NELAP	0.183	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Isophorone	NELAP	0.129	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
m,p-Cresol	NELAP	0.138	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Naphthalene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Nitrobenzene	NELAP	0.137	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
N-Nitroso-di-n-propylamine	NELAP	0.12	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
N-Nitrosodiphenylamine	NELAP	0.101	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
o-Cresol	NELAP	0.129	0.547		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Pentachlorophenol	NELAP	0.721	2.19		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Phenanthrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Phenol	NELAP	0.127	0.383		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 10:36	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		110.3	%REC	1	10/29/2013 10:36	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		78.4	%REC	1	10/29/2013 10:36	93100
Surr: 2-Fluorophenol		0	30.5-99		72.3	%REC	1	10/29/2013 10:36	93100
Surr: Nitrobenzene-d5		0	34.1-101		75.5	%REC	1	10/29/2013 10:36	93100
Surr: Phenol-d5		0	34.9-110		77.2	%REC	1	10/29/2013 10:36	93100
Surr: p-Terphenyl-d14		0	41.7-124		91.4	%REC	1	10/29/2013 10:36	93100

4-Nitrophenol was outside the upper QC limits in the LCS and MS. Sample results were below the reporting limit. Data is reportable.

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
1,1,1,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
2-Butanone	NELAP	0.0073	0.036		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
2-Hexanone	NELAP	0.0073	0.036		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
4-Methyl-2-pentanone	NELAP	0.0073	0.036		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Acetone	NELAP	0.0073	0.036		0.049	mg/Kg-dry	1	10/26/2013 7:48	93122
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-001

Client Sample ID: 2396-3-B25

Matrix: SOLID

Collection Date: 10/23/2013 10:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Carbon disulfide	NELAP	0.0022	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Chlorobenzene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Chloroethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Chloromethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Ethylbenzene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
m,p-Xylenes	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Methylene chloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
o-Xylene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Toluene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Vinyl acetate	NELAP	0.0146	0.036		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Xylenes, Total	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 7:48	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		112.4	%REC	1	10/26/2013 7:48	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		113.2	%REC	1	10/26/2013 7:48	93122
Surr: Dibromofluoromethane		0	77.7-120		106.2	%REC	1	10/26/2013 7:48	93122
Surr: Toluene-d8		0	86-116		88.6	%REC	1	10/26/2013 7:48	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-002

Client Sample ID: 2396-3-B26

Matrix: SOLID

Collection Date: 10/23/2013 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		13.3	%	1	10/25/2013 15:04	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		86.7	%	1	10/25/2013 15:04	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.24		1	10/25/2013 18:57	R183256
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0466	mg/L	1	10/29/2013 15:36	93140
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 15:36	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 15:36	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 15:36	93140
Chromium	NELAP	0.004	0.01	J	0.0045	mg/L	1	10/29/2013 15:36	93140
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 15:36	93140
Iron	NELAP	0.007	0.02		3.3	mg/L	1	10/29/2013 15:36	93140
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 15:36	93140
Manganese	NELAP	0.0016	0.005		0.0137	mg/L	1	10/29/2013 15:36	93140
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	10/29/2013 15:36	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 15:36	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 15:36	93140
Zinc	NELAP	0.0021	0.01	J	0.0096	mg/L	1	10/29/2013 15:36	93140
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	10/30/2013 11:22	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 15:59	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 14:11	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	10/29/2013 20:12	93105
Arsenic	NELAP	1.18	2.36		4.75	mg/Kg-dry	1	10/29/2013 14:39	93103
Barium	NELAP	0.24	0.47		42.4	mg/Kg-dry	1	10/29/2013 14:39	93103
Beryllium	NELAP	0.05	0.09		0.46	mg/Kg-dry	1	10/29/2013 14:39	93103
Boron	NELAP	0.94	1.89		8.74	mg/Kg-dry	1	10/29/2013 14:39	93103
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	10/29/2013 14:39	93103
Calcium	NELAP	2.36	4.72		87000	mg/Kg-dry	1	10/29/2013 14:39	93103
Chromium	NELAP	0.47	0.94	X	15.9	mg/Kg-dry	1	10/29/2013 14:39	93103
Cobalt	NELAP	0.47	0.94		5.82	mg/Kg-dry	1	10/29/2013 14:39	93103
Copper	NELAP	0.47	0.94		18	mg/Kg-dry	1	10/29/2013 14:39	93103
Iron	NELAP	0.94	1.89	X	17500	mg/Kg-dry	1	10/29/2013 14:39	93103
Lead	NELAP	1.89	3.77		6.16	mg/Kg-dry	1	10/29/2013 14:39	93103
Magnesium	NELAP	0.47	0.94		40000	mg/Kg-dry	1	10/29/2013 14:39	93103
Manganese	NELAP	0.24	0.47		362	mg/Kg-dry	1	10/29/2013 14:39	93103
Nickel	NELAP	0.47	0.94		16	mg/Kg-dry	1	10/29/2013 14:39	93103
Potassium	NELAP	4.72	9.43		2740	mg/Kg-dry	1	10/29/2013 14:39	93103
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	10/29/2013 14:39	93103
Sodium	NELAP	2.36	4.72		147	mg/Kg-dry	1	10/29/2013 14:39	93103
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	10/29/2013 14:39	93103
Vanadium	NELAP	0.47	0.94		24.4	mg/Kg-dry	1	10/29/2013 14:39	93103
Zinc	NELAP	0.47	0.94		35.1	mg/Kg-dry	1	10/29/2013 14:39	93103

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-002

Client Sample ID: 2396-3-B26

Matrix: SOLID

Collection Date: 10/23/2013 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		< 0.588	mg/Kg-dry	1	10/31/2013 15:48	93104
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.019	mg/Kg-dry	1	10/28/2013 10:15	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.152	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
1,2-Dichlorobenzene	NELAP	0.182	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
1,3-Dichlorobenzene	NELAP	0.192	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
1,4-Dichlorobenzene	NELAP	0.182	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
2,4,5-Trichlorophenol	NELAP	0.109	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
2,4,6-Trichlorophenol	NELAP	0.144	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
2,4-Dichlorophenol	NELAP	0.138	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
2,4-Dimethylphenol	NELAP	0.145	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
2,4-Dinitrophenol	NELAP	0.122	1.14		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
2,4-Dinitrotoluene	NELAP	0.119	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
2,6-Dinitrotoluene	NELAP	0.123	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
2-Chloronaphthalene	NELAP	0.137	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
2-Chlorophenol	NELAP	0.145	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
2-Methylnaphthalene	NELAP	0.136	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
2-Nitroaniline	NELAP	0.104	1.14		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
2-Nitrophenol	NELAP	0.128	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
3,3'-Dichlorobenzidine	NELAP	0.228	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
3-Nitroaniline	NELAP	0.094	1.14		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
4,6-Dinitro-2-methylphenol	NELAP	0.123	1.14		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
4-Bromophenyl phenyl ether	NELAP	0.105	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
4-Chloro-3-methylphenol	NELAP	0.126	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
4-Chloroaniline	NELAP	0.138	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
4-Chlorophenyl phenyl ether	NELAP	0.113	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
4-Nitroaniline	NELAP	0.104	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
4-Nitrophenol	NELAP	0.112	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Acenaphthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Acenaphthylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Benzo(a)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Benzo(a)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Benzo(b)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Benzo(g,h,i)perylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Benzo(k)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Bis(2-chloroethoxy)methane	NELAP	0.134	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Bis(2-chloroethyl)ether	NELAP	0.162	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Bis(2-chloroisopropyl)ether	NELAP	0.13	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.134	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Butyl benzyl phthalate	NELAP	0.115	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Carbazole		0.139	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Chrysene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Dibenzo(a,h)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Dibenzofuran	NELAP	0.144	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Diethyl phthalate	NELAP	0.11	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-002

Client Sample ID: 2396-3-B26

Matrix: SOLID

Collection Date: 10/23/2013 10:40

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	0.104	0.4	J	0.111	mg/Kg-dry	1	10/29/2013 12:14	93100
Di-n-butyl phthalate	NELAP	0.118	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Di-n-octyl phthalate	NELAP	0.119	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Fluorene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Hexachlorobenzene	NELAP	0.112	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Hexachlorobutadiene	NELAP	0.177	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Hexachlorocyclopentadiene	NELAP	0.116	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Hexachloroethane	NELAP	0.191	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Isophorone	NELAP	0.135	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
m,p-Cresol	NELAP	0.144	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Naphthalene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Nitrobenzene	NELAP	0.143	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
N-Nitroso-di-n-propylamine	NELAP	0.126	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
N-Nitrosodiphenylamine	NELAP	0.105	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
o-Cresol	NELAP	0.135	0.571		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Pentachlorophenol	NELAP	0.754	2.28		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Phenanthrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Phenol	NELAP	0.132	0.4		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/29/2013 12:14	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		87.8	%REC	1	10/29/2013 12:14	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		71.7	%REC	1	10/29/2013 12:14	93100
Surr: 2-Fluorophenol		0	30.5-99		55.6	%REC	1	10/29/2013 12:14	93100
Surr: Nitrobenzene-d5		0	34.1-101		68.2	%REC	1	10/29/2013 12:14	93100
Surr: Phenol-d5		0	34.9-110		64.4	%REC	1	10/29/2013 12:14	93100
Surr: p-Terphenyl-d14		0	41.7-124		85	%REC	1	10/29/2013 12:14	93100

4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
2-Butanone	NELAP	0.0078	0.039		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
2-Hexanone	NELAP	0.0078	0.039		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
4-Methyl-2-pentanone	NELAP	0.0078	0.039		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Acetone	NELAP	0.0078	0.039		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Benzene	NELAP	0.0004	0.001		0.004	mg/Kg-dry	1	10/26/2013 8:15	93122
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Bromomethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Carbon disulfide	NELAP	0.0024	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-002

Client Sample ID: 2396-3-B26

Matrix: SOLID

Collection Date: 10/23/2013 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	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Chloroethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Chloromethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Ethylbenzene	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	10/26/2013 8:15	93122
m,p-Xylenes	NELAP	0.0008	0.004	J	0.003	mg/Kg-dry	1	10/26/2013 8:15	93122
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
o-Xylene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 8:15	93122
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Toluene	NELAP	0.0008	0.004		0.006	mg/Kg-dry	1	10/26/2013 8:15	93122
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Vinyl acetate	NELAP	0.0157	0.039		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 8:15	93122
Xylenes, Total	NELAP	0.0008	0.004		0.004	mg/Kg-dry	1	10/26/2013 8:15	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		111.2	%REC	1	10/26/2013 8:15	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		107.4	%REC	1	10/26/2013 8:15	93122
Surr: Dibromofluoromethane		0	77.7-120		107.4	%REC	1	10/26/2013 8:15	93122
Surr: Toluene-d8		0	86-116		91.3	%REC	1	10/26/2013 8:15	93122

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-003

Client Sample ID: 2396-3-B27

Matrix: SOLID

Collection Date: 10/23/2013 10:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		25.1	%	1	10/25/2013 15:05	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		74.9	%	1	10/25/2013 15:05	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.77		1	10/25/2013 19:00	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		0.0288	mg/L	1	11/01/2013 12:05	93269
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.11	mg/L	1	10/29/2013 15:40	93140
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 15:40	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 15:40	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 15:40	93140
Chromium	NELAP	0.004	0.01	J	0.0094	mg/L	1	10/29/2013 15:40	93140
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 15:40	93140
Iron	NELAP	0.007	0.02	X	7.28	mg/L	1	10/29/2013 15:40	93140
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 15:40	93140
Manganese	NELAP	0.0016	0.005		0.0259	mg/L	1	10/29/2013 15:40	93140
Nickel	NELAP	0.0033	0.01	J	0.0057	mg/L	1	10/29/2013 15:40	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 15:40	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 15:40	93140
Zinc	NELAP	0.0021	0.01		0.0207	mg/L	1	10/29/2013 15:40	93140
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	10/30/2013 11:33	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 16:09	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 14:14	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/29/2013 20:16	93105
Arsenic	NELAP	1.25	2.5		7.29	mg/Kg-dry	1	10/29/2013 14:45	93103
Barium	NELAP	0.25	0.5		162	mg/Kg-dry	1	10/29/2013 14:45	93103
Beryllium	NELAP	0.05	0.1		0.88	mg/Kg-dry	1	10/29/2013 14:45	93103
Boron	NELAP	1	2	J	1.08	mg/Kg-dry	1	10/29/2013 14:45	93103
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	10/29/2013 14:45	93103
Calcium	NELAP	2.5	5		5750	mg/Kg-dry	1	10/29/2013 14:45	93103
Chromium	NELAP	0.5	1	X	27.8	mg/Kg-dry	1	10/29/2013 14:45	93103
Cobalt	NELAP	0.5	1		6.84	mg/Kg-dry	1	10/29/2013 14:45	93103
Copper	NELAP	0.5	1		17.2	mg/Kg-dry	1	10/29/2013 14:45	93103
Iron	NELAP	1	2	X	26000	mg/Kg-dry	1	10/29/2013 14:45	93103
Lead	NELAP	2	4		12.5	mg/Kg-dry	1	10/29/2013 14:45	93103
Magnesium	NELAP	0.5	1		5340	mg/Kg-dry	1	10/29/2013 14:45	93103
Manganese	NELAP	0.25	0.5		179	mg/Kg-dry	1	10/29/2013 14:45	93103
Nickel	NELAP	0.5	1		21.8	mg/Kg-dry	1	10/29/2013 14:45	93103
Potassium	NELAP	5	10		1630	mg/Kg-dry	1	10/29/2013 14:45	93103
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	10/29/2013 14:45	93103
Sodium	NELAP	2.5	5		789	mg/Kg-dry	1	10/29/2013 14:45	93103
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	10/29/2013 14:45	93103

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-003

Client Sample ID: 2396-3-B27

Matrix: SOLID

Collection Date: 10/23/2013 10:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.5	1		46.8	mg/Kg-dry	1	10/29/2013 14:45	93103
Zinc	NELAP	0.5	1		71	mg/Kg-dry	1	10/29/2013 14:45	93103
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.337	0.577		< 0.577	mg/Kg-dry	1	10/31/2013 15:51	93104
SW-846 7471B									
Mercury	NELAP	0.003	0.013		0.056	mg/Kg-dry	1	10/28/2013 10:17	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.177	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
1,2-Dichlorobenzene	NELAP	0.212	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
1,3-Dichlorobenzene	NELAP	0.224	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
1,4-Dichlorobenzene	NELAP	0.212	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
2,4,5-Trichlorophenol	NELAP	0.127	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
2,4,6-Trichlorophenol	NELAP	0.168	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
2,4-Dichlorophenol	NELAP	0.161	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
2,4-Dimethylphenol	NELAP	0.169	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
2,4-Dinitrophenol	NELAP	0.143	1.33		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
2,4-Dinitrotoluene	NELAP	0.139	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
2,6-Dinitrotoluene	NELAP	0.144	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
2-Chloronaphthalene	NELAP	0.16	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
2-Chlorophenol	NELAP	0.169	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
2-Methylnaphthalene	NELAP	0.159	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
2-Nitroaniline	NELAP	0.121	1.33		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
2-Nitrophenol	NELAP	0.149	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
3,3'-Dichlorobenzidine	NELAP	0.267	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
3-Nitroaniline	NELAP	0.109	1.33		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
4,6-Dinitro-2-methylphenol	NELAP	0.144	1.33		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
4-Bromophenyl phenyl ether	NELAP	0.123	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
4-Chloro-3-methylphenol	NELAP	0.147	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
4-Chloroaniline	NELAP	0.161	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
4-Chlorophenyl phenyl ether	NELAP	0.132	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
4-Nitroaniline	NELAP	0.121	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
4-Nitrophenol	NELAP	0.131	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Acenaphthene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Acenaphthylene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Anthracene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Benzo(a)anthracene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Benzo(a)pyrene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Benzo(b)fluoranthene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Benzo(g,h,i)perylene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Benzo(k)fluoranthene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Bis(2-chloroethoxy)methane	NELAP	0.156	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Bis(2-chloroethyl)ether	NELAP	0.189	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Bis(2-chloroisopropyl)ether	NELAP	0.152	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.156	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Butyl benzyl phthalate	NELAP	0.135	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Carbazole		0.163	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Chrysene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-003

Client Sample ID: 2396-3-B27

Matrix: SOLID

Collection Date: 10/23/2013 10:50

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	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Dibenzofuran	NELAP	0.168	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Diethyl phthalate	NELAP	0.128	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Dimethyl phthalate	NELAP	0.121	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Di-n-butyl phthalate	NELAP	0.137	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Di-n-octyl phthalate	NELAP	0.139	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Fluoranthene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Fluorene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Hexachlorobenzene	NELAP	0.131	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Hexachlorobutadiene	NELAP	0.207	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Hexachlorocyclopentadiene	NELAP	0.136	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Hexachloroethane	NELAP	0.223	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Isophorone	NELAP	0.157	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
m,p-Cresol	NELAP	0.168	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Naphthalene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Nitrobenzene	NELAP	0.167	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
N-Nitroso-di-n-propylamine	NELAP	0.147	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
N-Nitrosodiphenylamine	NELAP	0.123	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
o-Cresol	NELAP	0.157	0.667		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Pentachlorophenol	NELAP	0.88	2.67		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Phenanthrene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Phenol	NELAP	0.155	0.467		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Pyrene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	10/29/2013 13:19	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		93	%REC	1	10/29/2013 13:19	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		69.7	%REC	1	10/29/2013 13:19	93100
Surr: 2-Fluorophenol		0	30.5-99		59.6	%REC	1	10/29/2013 13:19	93100
Surr: Nitrobenzene-d5		0	34.1-101		65.2	%REC	1	10/29/2013 13:19	93100
Surr: Phenol-d5		0	34.9-110		70.6	%REC	1	10/29/2013 13:19	93100
Surr: p-Terphenyl-d14		0	41.7-124		87	%REC	1	10/29/2013 13:19	93100
<i>4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.</i>									
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
1,1,2,2-Tetrachloroethane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
1,1,2-Trichloroethane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
1,1-Dichloroethane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
1,1-Dichloroethene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
1,2-Dichloroethane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
1,2-Dichloropropane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
1,3-Dichloropropene, Total		0.0011	0.004		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
2-Butanone	NELAP	0.0107	0.054	J	0.012	mg/Kg-dry	1	10/26/2013 8:41	93122
2-Hexanone	NELAP	0.0107	0.054		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
4-Methyl-2-pentanone	NELAP	0.0107	0.054		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Acetone	NELAP	0.0107	0.054		0.123	mg/Kg-dry	1	10/26/2013 8:41	93122
Benzene	NELAP	0.0005	0.001		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Bromodichloromethane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Bromoform	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-003

Client Sample ID: 2396-3-B27

Matrix: SOLID

Collection Date: 10/23/2013 10:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0021	0.011		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Carbon disulfide	NELAP	0.0032	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Carbon tetrachloride	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Chlorobenzene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Chloroethane	NELAP	0.0021	0.011		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Chloroform	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Chloromethane	NELAP	0.0021	0.011		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
cis-1,2-Dichloroethene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
cis-1,3-Dichloropropene	NELAP	0.0011	0.004		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Dibromochloromethane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Ethylbenzene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
m,p-Xylenes	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Methylene chloride	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
o-Xylene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Styrene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Tetrachloroethene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Toluene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
trans-1,2-Dichloroethene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
trans-1,3-Dichloropropene	NELAP	0.0011	0.004		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Trichloroethene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Vinyl acetate	NELAP	0.0214	0.054		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Xylenes, Total	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	10/26/2013 8:41	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		113	%REC	1	10/26/2013 8:41	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		104.1	%REC	1	10/26/2013 8:41	93122
Surr: Dibromofluoromethane		0	77.7-120		107.4	%REC	1	10/26/2013 8:41	93122
Surr: Toluene-d8		0	86-116		94.5	%REC	1	10/26/2013 8:41	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-004

Client Sample ID: 2396-3-B29

Matrix: SOLID

Collection Date: 10/23/2013 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		6	%	1	10/25/2013 15:34	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		94	%	1	10/25/2013 15:34	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.27		1	10/25/2013 19:02	R183256
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0392	mg/L	1	10/29/2013 15:44	93140
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 15:44	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 15:44	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 15:44	93140
Chromium	NELAP	0.004	0.01		< 0.01	mg/L	1	10/29/2013 15:44	93140
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 15:44	93140
Iron	NELAP	0.007	0.02		1.52	mg/L	1	10/29/2013 15:44	93140
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 15:44	93140
Manganese	NELAP	0.0016	0.005		0.0101	mg/L	1	10/29/2013 15:44	93140
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	10/29/2013 15:44	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 15:44	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 15:44	93140
Zinc	NELAP	0.0021	0.01	J	0.0078	mg/L	1	10/29/2013 15:44	93140
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	10/30/2013 11:36	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 16:12	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 14:20	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/29/2013 20:20	93105
Arsenic	NELAP	1.18	2.36		5.22	mg/Kg-dry	1	10/29/2013 14:51	93103
Barium	NELAP	0.24	0.47		40.4	mg/Kg-dry	1	10/29/2013 14:51	93103
Beryllium	NELAP	0.05	0.09		0.33	mg/Kg-dry	1	10/29/2013 14:51	93103
Boron	NELAP	0.94	1.89		6.98	mg/Kg-dry	1	10/29/2013 14:51	93103
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	10/29/2013 14:51	93103
Calcium	NELAP	2.36	4.72		82200	mg/Kg-dry	1	10/29/2013 14:51	93103
Chromium	NELAP	0.47	0.94		11.2	mg/Kg-dry	1	10/29/2013 14:51	93103
Cobalt	NELAP	0.47	0.94		5.38	mg/Kg-dry	1	10/29/2013 14:51	93103
Copper	NELAP	0.47	0.94		15	mg/Kg-dry	1	10/29/2013 14:51	93103
Iron	NELAP	0.94	1.89		13400	mg/Kg-dry	1	10/29/2013 14:51	93103
Lead	NELAP	1.89	3.77		6.22	mg/Kg-dry	1	10/29/2013 14:51	93103
Magnesium	NELAP	0.47	0.94		37400	mg/Kg-dry	1	10/29/2013 14:51	93103
Manganese	NELAP	0.24	0.47		318	mg/Kg-dry	1	10/29/2013 14:51	93103
Nickel	NELAP	0.47	0.94		12.3	mg/Kg-dry	1	10/29/2013 14:51	93103
Potassium	NELAP	4.72	9.43		1770	mg/Kg-dry	1	10/29/2013 14:51	93103
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	10/29/2013 14:51	93103
Sodium	NELAP	2.36	4.72		133	mg/Kg-dry	1	10/29/2013 14:51	93103
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	10/29/2013 14:51	93103
Vanadium	NELAP	0.47	0.94		18.4	mg/Kg-dry	1	10/29/2013 14:51	93103
Zinc	NELAP	0.47	0.94		44.5	mg/Kg-dry	1	10/29/2013 14:51	93103

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-004

Client Sample ID: 2396-3-B29

Matrix: SOLID

Collection Date: 10/23/2013 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	10/31/2013 15:54	93104
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.011	mg/Kg-dry	1	10/28/2013 10:19	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.141	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
1,2-Dichlorobenzene	NELAP	0.168	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
1,3-Dichlorobenzene	NELAP	0.178	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
1,4-Dichlorobenzene	NELAP	0.168	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
2,4,5-Trichlorophenol	NELAP	0.1	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
2,4,6-Trichlorophenol	NELAP	0.133	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
2,4-Dichlorophenol	NELAP	0.128	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
2,4-Dimethylphenol	NELAP	0.134	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
2,4-Dinitrophenol	NELAP	0.113	1.06		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
2,4-Dinitrotoluene	NELAP	0.11	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
2,6-Dinitrotoluene	NELAP	0.114	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
2-Chloronaphthalene	NELAP	0.127	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
2-Chlorophenol	NELAP	0.134	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
2-Methylnaphthalene	NELAP	0.126	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
2-Nitroaniline	NELAP	0.096	1.06		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
2-Nitrophenol	NELAP	0.118	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
3,3'-Dichlorobenzidine	NELAP	0.211	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
3-Nitroaniline	NELAP	0.087	1.06		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
4,6-Dinitro-2-methylphenol	NELAP	0.114	1.06		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
4-Bromophenyl phenyl ether	NELAP	0.097	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
4-Chloro-3-methylphenol	NELAP	0.116	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
4-Chloroaniline	NELAP	0.128	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
4-Chlorophenyl phenyl ether	NELAP	0.105	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
4-Nitroaniline	NELAP	0.096	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
4-Nitrophenol	NELAP	0.104	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Acenaphthene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Acenaphthylene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Anthracene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Benzo(a)anthracene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Benzo(a)pyrene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Benzo(b)fluoranthene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Benzo(g,h,i)perylene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Benzo(k)fluoranthene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Bis(2-chloroethoxy)methane	NELAP	0.124	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Bis(2-chloroethyl)ether	NELAP	0.15	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Bis(2-chloroisopropyl)ether	NELAP	0.12	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.124	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Butyl benzyl phthalate	NELAP	0.107	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Carbazole		0.129	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Chrysene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Dibenzo(a,h)anthracene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Dibenzofuran	NELAP	0.133	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Diethyl phthalate	NELAP	0.101	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-004

Client Sample ID: 2396-3-B29

Matrix: SOLID

Collection Date: 10/23/2013 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	0.096	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Di-n-butyl phthalate	NELAP	0.109	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Di-n-octyl phthalate	NELAP	0.11	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Fluoranthene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Fluorene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Hexachlorobenzene	NELAP	0.104	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Hexachlorobutadiene	NELAP	0.164	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Hexachlorocyclopentadiene	NELAP	0.108	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Hexachloroethane	NELAP	0.176	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Isophorone	NELAP	0.125	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
m,p-Cresol	NELAP	0.133	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Naphthalene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Nitrobenzene	NELAP	0.132	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
N-Nitroso-di-n-propylamine	NELAP	0.116	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
N-Nitrosodiphenylamine	NELAP	0.097	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
o-Cresol	NELAP	0.125	0.528		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Pentachlorophenol	NELAP	0.697	2.11		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Phenanthrene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Phenol	NELAP	0.123	0.37		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Pyrene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	10/29/2013 13:51	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		91.6	%REC	1	10/29/2013 13:51	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		68	%REC	1	10/29/2013 13:51	93100
Surr: 2-Fluorophenol		0	30.5-99		59.6	%REC	1	10/29/2013 13:51	93100
Surr: Nitrobenzene-d5		0	34.1-101		66	%REC	1	10/29/2013 13:51	93100
Surr: Phenol-d5		0	34.9-110		67.2	%REC	1	10/29/2013 13:51	93100
Surr: p-Terphenyl-d14		0	41.7-124		86.4	%REC	1	10/29/2013 13:51	93100
<i>4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.</i>									
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
1,1,2,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
2-Butanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
2-Hexanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
4-Methyl-2-pentanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Acetone	NELAP	0.0074	0.037	J	0.021	mg/Kg-dry	1	10/26/2013 9:07	93122
Benzene	NELAP	0.0004	0.001		0.003	mg/Kg-dry	1	10/26/2013 9:07	93122
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Bromomethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Carbon disulfide	NELAP	0.0022	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-004

Client Sample ID: 2396-3-B29

Matrix: SOLID

Collection Date: 10/23/2013 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	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Chloroethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Chloromethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Ethylbenzene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 9:07	93122
m,p-Xylenes	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	10/26/2013 9:07	93122
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Methylene chloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
o-Xylene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 9:07	93122
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Toluene	NELAP	0.0007	0.004		0.004	mg/Kg-dry	1	10/26/2013 9:07	93122
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Vinyl acetate	NELAP	0.0149	0.037		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 9:07	93122
Xylenes, Total	NELAP	0.0007	0.004	J	0.003	mg/Kg-dry	1	10/26/2013 9:07	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		109.2	%REC	1	10/26/2013 9:07	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		110.6	%REC	1	10/26/2013 9:07	93122
Surr: Dibromofluoromethane		0	77.7-120		106.1	%REC	1	10/26/2013 9:07	93122
Surr: Toluene-d8		0	86-116		91.7	%REC	1	10/26/2013 9:07	93122

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-005

Client Sample ID: 2396-3-B29 DUP

Matrix: SOLID

Collection Date: 10/23/2013 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		8.5	%	1	10/25/2013 15:34	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		91.5	%	1	10/25/2013 15:34	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.06		1	10/25/2013 19:08	R183256
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0435	mg/L	1	10/29/2013 15:47	93140
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 15:47	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 15:47	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 15:47	93140
Chromium	NELAP	0.004	0.01		< 0.01	mg/L	1	10/29/2013 15:47	93140
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 15:47	93140
Iron	NELAP	0.007	0.02		2.24	mg/L	1	10/29/2013 15:47	93140
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 15:47	93140
Manganese	NELAP	0.0016	0.005		0.017	mg/L	1	10/29/2013 15:47	93140
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	10/29/2013 15:47	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 15:47	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 15:47	93140
Zinc	NELAP	0.0021	0.01		0.0111	mg/L	1	10/29/2013 15:47	93140
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	10/30/2013 11:40	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 16:16	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 14:27	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/29/2013 20:31	93105
Arsenic	NELAP	1.25	2.5		5.43	mg/Kg-dry	1	10/29/2013 14:57	93103
Barium	NELAP	0.25	0.5		39.2	mg/Kg-dry	1	10/29/2013 14:57	93103
Beryllium	NELAP	0.05	0.1		0.33	mg/Kg-dry	1	10/29/2013 14:57	93103
Boron	NELAP	1	2		7.02	mg/Kg-dry	1	10/29/2013 14:57	93103
Cadmium	NELAP	0.1	0.2	J	0.12	mg/Kg-dry	1	10/29/2013 14:57	93103
Calcium	NELAP	2.5	5		80800	mg/Kg-dry	1	10/29/2013 14:57	93103
Chromium	NELAP	0.5	1		11.2	mg/Kg-dry	1	10/29/2013 14:57	93103
Cobalt	NELAP	0.5	1		5.15	mg/Kg-dry	1	10/29/2013 14:57	93103
Copper	NELAP	0.5	1		14.5	mg/Kg-dry	1	10/29/2013 14:57	93103
Iron	NELAP	1	2		13500	mg/Kg-dry	1	10/29/2013 14:57	93103
Lead	NELAP	2	4		6.89	mg/Kg-dry	1	10/29/2013 14:57	93103
Magnesium	NELAP	0.5	1		35800	mg/Kg-dry	1	10/29/2013 14:57	93103
Manganese	NELAP	0.25	0.5		311	mg/Kg-dry	1	10/29/2013 14:57	93103
Nickel	NELAP	0.5	1		12.3	mg/Kg-dry	1	10/29/2013 14:57	93103
Potassium	NELAP	5	10		1790	mg/Kg-dry	1	10/29/2013 14:57	93103
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	10/29/2013 14:57	93103
Sodium	NELAP	2.5	5		129	mg/Kg-dry	1	10/29/2013 14:57	93103
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	10/29/2013 14:57	93103
Vanadium	NELAP	0.5	1		19.2	mg/Kg-dry	1	10/29/2013 14:57	93103
Zinc	NELAP	0.5	1		54.1	mg/Kg-dry	1	10/29/2013 14:57	93103



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-005

Client Sample ID: 2396-3-B29 DUP

Matrix: SOLID

Collection Date: 10/23/2013 9:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.318	0.545		< 0.545	mg/Kg-dry	1	10/31/2013 15:58	93104
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.036	mg/Kg-dry	1	10/28/2013 10:22	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.144	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
1,2-Dichlorobenzene	NELAP	0.172	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
1,3-Dichlorobenzene	NELAP	0.182	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
1,4-Dichlorobenzene	NELAP	0.172	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
2,4,5-Trichlorophenol	NELAP	0.103	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
2,4,6-Trichlorophenol	NELAP	0.137	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
2,4-Dichlorophenol	NELAP	0.131	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
2,4-Dimethylphenol	NELAP	0.138	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
2,4-Dinitrophenol	NELAP	0.116	1.08		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
2,4-Dinitrotoluene	NELAP	0.113	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
2,6-Dinitrotoluene	NELAP	0.117	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
2-Chloronaphthalene	NELAP	0.13	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
2-Chlorophenol	NELAP	0.138	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
2-Methylnaphthalene	NELAP	0.129	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
2-Nitroaniline	NELAP	0.099	1.08		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
2-Nitrophenol	NELAP	0.121	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
3,3'-Dichlorobenzidine	NELAP	0.217	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
3-Nitroaniline	NELAP	0.089	1.08		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
4,6-Dinitro-2-methylphenol	NELAP	0.117	1.08		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
4-Bromophenyl phenyl ether	NELAP	0.1	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
4-Chloro-3-methylphenol	NELAP	0.119	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
4-Chloroaniline	NELAP	0.131	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
4-Chlorophenyl phenyl ether	NELAP	0.107	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
4-Nitroaniline	NELAP	0.099	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
4-Nitrophenol	NELAP	0.106	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Acenaphthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Acenaphthylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Benzo(a)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Benzo(a)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Benzo(b)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Benzo(g,h,i)perylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Benzo(k)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Bis(2-chloroethoxy)methane	NELAP	0.127	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Bis(2-chloroethyl)ether	NELAP	0.154	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Bis(2-chloroisopropyl)ether	NELAP	0.124	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.127	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Butyl benzyl phthalate	NELAP	0.11	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Carbazole		0.132	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Chrysene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Dibenzo(a,h)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Dibenzofuran	NELAP	0.137	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Diethyl phthalate	NELAP	0.104	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-005

Client Sample ID: 2396-3-B29 DUP

Matrix: SOLID

Collection Date: 10/23/2013 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	0.099	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Di-n-butyl phthalate	NELAP	0.112	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Di-n-octyl phthalate	NELAP	0.113	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Fluorene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Hexachlorobenzene	NELAP	0.106	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Hexachlorobutadiene	NELAP	0.168	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Hexachlorocyclopentadiene	NELAP	0.111	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Hexachloroethane	NELAP	0.181	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Isophorone	NELAP	0.128	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
m,p-Cresol	NELAP	0.137	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Naphthalene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Nitrobenzene	NELAP	0.136	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
N-Nitroso-di-n-propylamine	NELAP	0.119	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
N-Nitrosodiphenylamine	NELAP	0.1	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
o-Cresol	NELAP	0.128	0.542		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Pentachlorophenol	NELAP	0.716	2.17		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Phenanthrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Phenol	NELAP	0.126	0.38		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	10/29/2013 14:23	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		98.5	%REC	1	10/29/2013 14:23	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		73.7	%REC	1	10/29/2013 14:23	93100
Surr: 2-Fluorophenol		0	30.5-99		63.5	%REC	1	10/29/2013 14:23	93100
Surr: Nitrobenzene-d5		0	34.1-101		69.1	%REC	1	10/29/2013 14:23	93100
Surr: Phenol-d5		0	34.9-110		73.5	%REC	1	10/29/2013 14:23	93100
Surr: p-Terphenyl-d14		0	41.7-124		88.8	%REC	1	10/29/2013 14:23	93100

4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
1,1,1,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
2-Butanone	NELAP	0.0075	0.037		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
2-Hexanone	NELAP	0.0075	0.037		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
4-Methyl-2-pentanone	NELAP	0.0075	0.037		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Acetone	NELAP	0.0075	0.037	J	0.016	mg/Kg-dry	1	10/26/2013 9:33	93122
Benzene	NELAP	0.0004	0.001		0.004	mg/Kg-dry	1	10/26/2013 9:33	93122
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Bromomethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Carbon disulfide	NELAP	0.0022	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-005

Client Sample ID: 2396-3-B29 DUP

Matrix: SOLID

Collection Date: 10/23/2013 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	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Chloroethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Chloromethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Ethylbenzene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 9:33	93122
m,p-Xylenes	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	10/26/2013 9:33	93122
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Methylene chloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
o-Xylene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 9:33	93122
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Toluene	NELAP	0.0007	0.004		0.005	mg/Kg-dry	1	10/26/2013 9:33	93122
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Vinyl acetate	NELAP	0.0149	0.037		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 9:33	93122
Xylenes, Total	NELAP	0.0007	0.004	J	0.003	mg/Kg-dry	1	10/26/2013 9:33	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		109	%REC	1	10/26/2013 9:33	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		108.5	%REC	1	10/26/2013 9:33	93122
Surr: Dibromofluoromethane		0	77.7-120		106.8	%REC	1	10/26/2013 9:33	93122
Surr: Toluene-d8		0	86-116		91.5	%REC	1	10/26/2013 9:33	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-006

Client Sample ID: 2396-3-B30

Matrix: SOLID

Collection Date: 10/23/2013 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		8.2	%	1	10/25/2013 15:34	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		91.8	%	1	10/25/2013 15:34	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.2		1	10/25/2013 19:09	R183256
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0772	mg/L	1	10/29/2013 15:51	93140
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 15:51	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 15:51	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 15:51	93140
Chromium	NELAP	0.004	0.01	J	0.007	mg/L	1	10/29/2013 15:51	93140
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 15:51	93140
Iron	NELAP	0.007	0.02		4.41	mg/L	1	10/29/2013 15:51	93140
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 15:51	93140
Manganese	NELAP	0.0016	0.005		0.0427	mg/L	1	10/29/2013 15:51	93140
Nickel	NELAP	0.0033	0.01	J	0.0038	mg/L	1	10/29/2013 15:51	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 15:51	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 15:51	93140
Zinc	NELAP	0.0021	0.01		0.0126	mg/L	1	10/29/2013 15:51	93140
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	10/30/2013 12:06	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 16:19	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 14:30	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	10/29/2013 20:34	93105
Arsenic	NELAP	1.18	2.36	J	2.34	mg/Kg-dry	1	10/29/2013 15:03	93103
Barium	NELAP	0.24	0.47		43.2	mg/Kg-dry	1	10/29/2013 15:03	93103
Beryllium	NELAP	0.05	0.09		0.4	mg/Kg-dry	1	10/29/2013 15:03	93103
Boron	NELAP	0.94	1.89		8.69	mg/Kg-dry	1	10/29/2013 15:03	93103
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	10/29/2013 15:03	93103
Calcium	NELAP	2.36	4.72		98300	mg/Kg-dry	1	10/29/2013 15:03	93103
Chromium	NELAP	0.47	0.94		12.4	mg/Kg-dry	1	10/29/2013 15:03	93103
Cobalt	NELAP	0.47	0.94		4.15	mg/Kg-dry	1	10/29/2013 15:03	93103
Copper	NELAP	0.47	0.94		11.5	mg/Kg-dry	1	10/29/2013 15:03	93103
Iron	NELAP	0.94	1.89		11000	mg/Kg-dry	1	10/29/2013 15:03	93103
Lead	NELAP	1.89	3.77		4.25	mg/Kg-dry	1	10/29/2013 15:03	93103
Magnesium	NELAP	0.47	0.94		43900	mg/Kg-dry	1	10/29/2013 15:03	93103
Manganese	NELAP	0.24	0.47		252	mg/Kg-dry	1	10/29/2013 15:03	93103
Nickel	NELAP	0.47	0.94		11	mg/Kg-dry	1	10/29/2013 15:03	93103
Potassium	NELAP	4.72	9.43		2250	mg/Kg-dry	1	10/29/2013 15:03	93103
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	10/29/2013 15:03	93103
Sodium	NELAP	2.36	4.72		148	mg/Kg-dry	1	10/29/2013 15:03	93103
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	10/29/2013 15:03	93103
Vanadium	NELAP	0.47	0.94		19.4	mg/Kg-dry	1	10/29/2013 15:03	93103
Zinc	NELAP	0.47	0.94		17.4	mg/Kg-dry	1	10/29/2013 15:03	93103



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-006

Client Sample ID: 2396-3-B30

Matrix: SOLID

Collection Date: 10/23/2013 9:10

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	10/31/2013 16:01	93104
SW-846 7471B									
Mercury	NELAP	0.003	0.01	J	0.01	mg/Kg-dry	1	10/28/2013 10:24	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.144	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
1,2-Dichlorobenzene	NELAP	0.172	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
1,3-Dichlorobenzene	NELAP	0.182	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
1,4-Dichlorobenzene	NELAP	0.172	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
2,4,5-Trichlorophenol	NELAP	0.103	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
2,4,6-Trichlorophenol	NELAP	0.137	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
2,4-Dichlorophenol	NELAP	0.131	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
2,4-Dimethylphenol	NELAP	0.138	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
2,4-Dinitrophenol	NELAP	0.116	1.08		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
2,4-Dinitrotoluene	NELAP	0.113	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
2,6-Dinitrotoluene	NELAP	0.117	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
2-Chloronaphthalene	NELAP	0.13	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
2-Chlorophenol	NELAP	0.138	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
2-Methylnaphthalene	NELAP	0.129	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
2-Nitroaniline	NELAP	0.099	1.08		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
2-Nitrophenol	NELAP	0.121	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
3,3'-Dichlorobenzidine	NELAP	0.217	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
3-Nitroaniline	NELAP	0.089	1.08		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
4,6-Dinitro-2-methylphenol	NELAP	0.117	1.08		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
4-Bromophenyl phenyl ether	NELAP	0.1	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
4-Chloro-3-methylphenol	NELAP	0.119	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
4-Chloroaniline	NELAP	0.131	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
4-Chlorophenyl phenyl ether	NELAP	0.107	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
4-Nitroaniline	NELAP	0.099	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
4-Nitrophenol	NELAP	0.106	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Acenaphthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Acenaphthylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Benzo(a)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Benzo(a)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Benzo(b)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Benzo(g,h,i)perylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Benzo(k)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Bis(2-chloroethoxy)methane	NELAP	0.127	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Bis(2-chloroethyl)ether	NELAP	0.154	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Bis(2-chloroisopropyl)ether	NELAP	0.124	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.127	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Butyl benzyl phthalate	NELAP	0.11	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Carbazole		0.132	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Chrysene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Dibenzo(a,h)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Dibenzofuran	NELAP	0.137	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Diethyl phthalate	NELAP	0.104	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-006

Client Sample ID: 2396-3-B30

Matrix: SOLID

Collection Date: 10/23/2013 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	0.099	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Di-n-butyl phthalate	NELAP	0.112	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Di-n-octyl phthalate	NELAP	0.113	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Fluorene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Hexachlorobenzene	NELAP	0.106	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Hexachlorobutadiene	NELAP	0.168	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Hexachlorocyclopentadiene	NELAP	0.111	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Hexachloroethane	NELAP	0.181	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Isophorone	NELAP	0.128	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
m,p-Cresol	NELAP	0.137	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Naphthalene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Nitrobenzene	NELAP	0.136	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
N-Nitroso-di-n-propylamine	NELAP	0.119	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
N-Nitrosodiphenylamine	NELAP	0.1	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
o-Cresol	NELAP	0.128	0.542		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Pentachlorophenol	NELAP	0.716	2.17		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Phenanthrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Phenol	NELAP	0.126	0.379		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 14:05	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		74.4	%REC	1	11/03/2013 14:05	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		70.9	%REC	1	11/03/2013 14:05	93100
Surr: 2-Fluorophenol		0	30.5-99		66.8	%REC	1	11/03/2013 14:05	93100
Surr: Nitrobenzene-d5		0	34.1-101		65.5	%REC	1	11/03/2013 14:05	93100
Surr: Phenol-d5		0	34.9-110		75.6	%REC	1	11/03/2013 14:05	93100
Surr: p-Terphenyl-d14		0	41.7-124		81.3	%REC	1	11/03/2013 14:05	93100

4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
1,1,1,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
2-Butanone	NELAP	0.0076	0.038	J	0.01	mg/Kg-dry	1	10/28/2013 11:54	93166
2-Hexanone	NELAP	0.0076	0.038		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
4-Methyl-2-pentanone	NELAP	0.0076	0.038		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Acetone	NELAP	0.0076	0.038		0.074	mg/Kg-dry	1	10/28/2013 11:54	93166
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Bromomethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Carbon disulfide	NELAP	0.0023	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-006

Client Sample ID: 2396-3-B30

Matrix: SOLID

Collection Date: 10/23/2013 9:10

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	10/28/2013 11:54	93166
Chloroethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Chloromethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Ethylbenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
m,p-Xylenes	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Toluene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Vinyl acetate	NELAP	0.0152	0.038		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Xylenes, Total	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 11:54	93166
Surr: 1,2-Dichloroethane-d4		0	72.2-131		114	%REC	1	10/28/2013 11:54	93166
Surr: 4-Bromofluorobenzene		0	82.1-116		111.7	%REC	1	10/28/2013 11:54	93166
Surr: Dibromofluoromethane		0	77.7-120		108.5	%REC	1	10/28/2013 11:54	93166
Surr: Toluene-d8		0	86-116		88.4	%REC	1	10/28/2013 11:54	93166

Allowable Marginal Exceedance of acetone and trichloroethene in the LCS verified per 2009 TNI Standard (Volume 1, Module 4, section 1.7.4.2).



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-008

Client Sample ID: 2396-3-B32

Matrix: SOLID

Collection Date: 10/23/2013 10:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		8.3	%	1	10/25/2013 15:35	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		91.7	%	1	10/25/2013 15:35	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.56		1	10/25/2013 19:15	R183256
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		< 0.05	mg/L	1	10/29/2013 16:13	93140
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 16:13	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 16:13	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 16:13	93140
Chromium	NELAP	0.004	0.01		< 0.01	mg/L	1	10/29/2013 16:13	93140
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 16:13	93140
Iron	NELAP	0.007	0.02		0.399	mg/L	1	10/29/2013 16:13	93140
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 16:13	93140
Manganese	NELAP	0.0016	0.005	J	0.0043	mg/L	1	10/29/2013 16:13	93140
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	10/29/2013 16:13	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 16:13	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 16:13	93140
Zinc	NELAP	0.0021	0.01	J	0.0043	mg/L	1	10/29/2013 16:13	93140
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	10/30/2013 12:14	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 16:26	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 14:34	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.55	4.9		< 4.9	mg/Kg-dry	1	10/29/2013 20:42	93105
Arsenic	NELAP	1.2	2.4		3.43	mg/Kg-dry	1	10/29/2013 15:16	93103
Barium	NELAP	0.24	0.48		11.1	mg/Kg-dry	1	10/29/2013 15:16	93103
Beryllium	NELAP	0.05	0.1		0.12	mg/Kg-dry	1	10/29/2013 15:16	93103
Boron	NELAP	0.96	1.92		2.26	mg/Kg-dry	1	10/29/2013 15:16	93103
Cadmium	NELAP	0.1	0.19		< 0.19	mg/Kg-dry	1	10/29/2013 15:16	93103
Calcium	NELAP	2.4	4.81		57700	mg/Kg-dry	1	10/29/2013 15:16	93103
Chromium	NELAP	0.48	0.96		4.97	mg/Kg-dry	1	10/29/2013 15:16	93103
Cobalt	NELAP	0.48	0.96		2.3	mg/Kg-dry	1	10/29/2013 15:16	93103
Copper	NELAP	0.48	0.96		9.95	mg/Kg-dry	1	10/29/2013 15:16	93103
Iron	NELAP	0.96	1.92		7530	mg/Kg-dry	1	10/29/2013 15:16	93103
Lead	NELAP	1.92	3.85		5.17	mg/Kg-dry	1	10/29/2013 15:16	93103
Magnesium	NELAP	0.48	0.96		25000	mg/Kg-dry	1	10/29/2013 15:16	93103
Manganese	NELAP	0.24	0.48		180	mg/Kg-dry	1	10/29/2013 15:16	93103
Nickel	NELAP	0.48	0.96		5.91	mg/Kg-dry	1	10/29/2013 15:16	93103
Potassium	NELAP	4.81	9.62		567	mg/Kg-dry	1	10/29/2013 15:16	93103
Silver	NELAP	0.48	0.53		< 0.53	mg/Kg-dry	1	10/29/2013 15:16	93103
Sodium	NELAP	2.4	4.81		189	mg/Kg-dry	1	10/29/2013 15:16	93103
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	10/29/2013 15:16	93103
Vanadium	NELAP	0.48	0.96		14.5	mg/Kg-dry	1	10/29/2013 15:16	93103
Zinc	NELAP	0.48	0.96		28.8	mg/Kg-dry	1	10/29/2013 15:16	93103



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-008

Client Sample ID: 2396-3-B32

Matrix: SOLID

Collection Date: 10/23/2013 10:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.324	0.556		< 0.556	mg/Kg-dry	1	10/31/2013 16:15	93104
SW-846 7471B									
Mercury	NELAP	0.003	0.011	J	0.006	mg/Kg-dry	1	10/28/2013 10:28	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.144	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
1,2-Dichlorobenzene	NELAP	0.173	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
1,3-Dichlorobenzene	NELAP	0.182	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
1,4-Dichlorobenzene	NELAP	0.173	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
2,4,5-Trichlorophenol	NELAP	0.103	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
2,4,6-Trichlorophenol	NELAP	0.137	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
2,4-Dichlorophenol	NELAP	0.131	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
2,4-Dimethylphenol	NELAP	0.138	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
2,4-Dinitrophenol	NELAP	0.116	1.09		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
2,4-Dinitrotoluene	NELAP	0.113	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
2,6-Dinitrotoluene	NELAP	0.117	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
2-Chloronaphthalene	NELAP	0.13	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
2-Chlorophenol	NELAP	0.138	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
2-Methylnaphthalene	NELAP	0.129	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
2-Nitroaniline	NELAP	0.099	1.09		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
2-Nitrophenol	NELAP	0.122	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
3,3'-Dichlorobenzidine	NELAP	0.217	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
3-Nitroaniline	NELAP	0.089	1.09		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
4,6-Dinitro-2-methylphenol	NELAP	0.117	1.09		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
4-Bromophenyl phenyl ether	NELAP	0.1	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
4-Chloro-3-methylphenol	NELAP	0.119	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
4-Chloroaniline	NELAP	0.131	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
4-Chlorophenyl phenyl ether	NELAP	0.108	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
4-Nitroaniline	NELAP	0.099	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
4-Nitrophenol	NELAP	0.106	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Acenaphthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Acenaphthylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Benzo(a)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Benzo(a)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Benzo(b)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Benzo(g,h,i)perylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Benzo(k)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Bis(2-chloroethoxy)methane	NELAP	0.127	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Bis(2-chloroethyl)ether	NELAP	0.154	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Bis(2-chloroisopropyl)ether	NELAP	0.124	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.127	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Butyl benzyl phthalate	NELAP	0.11	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Carbazole		0.132	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Chrysene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Dibenzo(a,h)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Dibenzofuran	NELAP	0.137	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Diethyl phthalate	NELAP	0.104	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-008

Client Sample ID: 2396-3-B32

Matrix: SOLID

Collection Date: 10/23/2013 10:10

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	0.099	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Di-n-butyl phthalate	NELAP	0.112	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Di-n-octyl phthalate	NELAP	0.113	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Fluorene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Hexachlorobenzene	NELAP	0.106	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Hexachlorobutadiene	NELAP	0.168	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Hexachlorocyclopentadiene	NELAP	0.111	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Hexachloroethane	NELAP	0.181	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Isophorone	NELAP	0.128	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
m,p-Cresol	NELAP	0.137	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Naphthalene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Nitrobenzene	NELAP	0.136	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
N-Nitroso-di-n-propylamine	NELAP	0.119	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
N-Nitrosodiphenylamine	NELAP	0.1	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
o-Cresol	NELAP	0.128	0.543		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Pentachlorophenol	NELAP	0.717	2.17		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Phenanthrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Phenol	NELAP	0.126	0.38		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 15:14	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		72.7	%REC	1	11/03/2013 15:14	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		69.3	%REC	1	11/03/2013 15:14	93100
Surr: 2-Fluorophenol		0	30.5-99		70.1	%REC	1	11/03/2013 15:14	93100
Surr: Nitrobenzene-d5		0	34.1-101		65.6	%REC	1	11/03/2013 15:14	93100
Surr: Phenol-d5		0	34.9-110		75.8	%REC	1	11/03/2013 15:14	93100
Surr: p-Terphenyl-d14		0	41.7-124		75.7	%REC	1	11/03/2013 15:14	93100

4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
1,1,1,2-Tetrachloroethane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
1,1,2-Trichloroethane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
1,1-Dichloroethane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
1,1-Dichloroethene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
1,2-Dichloroethane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
1,2-Dichloropropane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
2-Butanone	NELAP	0.0069	0.034		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
2-Hexanone	NELAP	0.0069	0.034		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
4-Methyl-2-pentanone	NELAP	0.0069	0.034		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Acetone	NELAP	0.0069	0.034	J	0.012	mg/Kg-dry	1	10/28/2013 13:43	93166
Benzene	NELAP	0.0003	0.001		0.001	mg/Kg-dry	1	10/28/2013 13:43	93166
Bromodichloromethane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Bromoform	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Bromomethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Carbon disulfide	NELAP	0.0021	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Carbon tetrachloride	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-008

Client Sample ID: 2396-3-B32

Matrix: SOLID

Collection Date: 10/23/2013 10:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chlorobenzene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Chloroethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Chloroform	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Chloromethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
cis-1,2-Dichloroethene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Dibromochloromethane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Ethylbenzene	NELAP	0.0007	0.003	J	0.001	mg/Kg-dry	1	10/28/2013 13:43	93166
m,p-Xylenes	NELAP	0.0007	0.003	J	0.002	mg/Kg-dry	1	10/28/2013 13:43	93166
Methyl tert-butyl ether	NELAP	0.0003	0.001		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Methylene chloride	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
o-Xylene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Styrene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Tetrachloroethene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Toluene	NELAP	0.0007	0.003	J	0.003	mg/Kg-dry	1	10/28/2013 13:43	93166
trans-1,2-Dichloroethene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Trichloroethene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Vinyl acetate	NELAP	0.0137	0.034		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Vinyl chloride	NELAP	0.0003	0.001		ND	mg/Kg-dry	1	10/28/2013 13:43	93166
Xylenes, Total	NELAP	0.0007	0.003	J	0.002	mg/Kg-dry	1	10/28/2013 13:43	93166
Surr: 1,2-Dichloroethane-d4		0	72.2-131		109.6	%REC	1	10/28/2013 13:43	93166
Surr: 4-Bromofluorobenzene		0	82.1-116		111.2	%REC	1	10/28/2013 13:43	93166
Surr: Dibromofluoromethane		0	77.7-120		107.9	%REC	1	10/28/2013 13:43	93166
Surr: Toluene-d8		0	86-116		88.7	%REC	1	10/28/2013 13:43	93166

Allowable Marginal Exceedance of acetone and trichloroethene in the LCS verified per 2009 TNI Standard (Volume 1, Module 4, section 1.7.4.2).



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-009

Client Sample ID: 2396-3-B01

Matrix: SOLID

Collection Date: 10/23/2013 13:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		20.1	%	1	10/25/2013 15:35	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		79.9	%	1	10/25/2013 15:35	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.22		1	10/25/2013 19:17	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		1.72	mg/L	1	11/01/2013 12:08	93269
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	11/01/2013 12:08	93269
Manganese	NELAP	0.0016	0.005		7.84	mg/L	1	11/01/2013 12:08	93269
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.298	mg/L	1	10/29/2013 16:17	93140
Beryllium	NELAP	0.0003	0.001	J	0.0006	mg/L	1	10/29/2013 16:17	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 16:17	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 16:17	93140
Chromium	NELAP	0.004	0.01		0.0357	mg/L	1	10/29/2013 16:17	93140
Cobalt	NELAP	0.0022	0.01	J	0.0094	mg/L	1	10/29/2013 16:17	93140
Iron	NELAP	0.007	0.02	X	35.6	mg/L	1	10/29/2013 16:17	93140
Lead	NELAP	0.006	0.007	X	0.0104	mg/L	1	10/29/2013 16:17	93140
Manganese	NELAP	0.0016	0.005	X	0.343	mg/L	1	10/29/2013 16:17	93140
Nickel	NELAP	0.0033	0.01		0.0221	mg/L	1	10/29/2013 16:17	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 16:17	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 16:17	93140
Zinc	NELAP	0.0021	0.01		0.0679	mg/L	1	10/29/2013 16:17	93140
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	10/30/2013 12:25	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 16:43	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002	J	0.00008	mg/L	1	10/29/2013 14:36	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/29/2013 20:45	93105
Arsenic	NELAP	1.25	2.5		8.99	mg/Kg-dry	1	10/29/2013 15:40	93103
Barium	NELAP	0.25	0.5		137	mg/Kg-dry	1	10/29/2013 15:40	93103
Beryllium	NELAP	0.05	0.1		0.82	mg/Kg-dry	1	10/29/2013 15:40	93103
Boron	NELAP	1	2		4.5	mg/Kg-dry	1	10/29/2013 15:40	93103
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	10/29/2013 15:40	93103
Calcium	NELAP	2.5	5	S	3200	mg/Kg-dry	1	10/29/2013 15:40	93103
Chromium	NELAP	0.5	1	X	28.9	mg/Kg-dry	1	10/29/2013 15:40	93103
Cobalt	NELAP	0.5	1		10.3	mg/Kg-dry	1	10/29/2013 15:40	93103
Copper	NELAP	0.5	1		20.9	mg/Kg-dry	1	10/29/2013 15:40	93103
Iron	NELAP	1	2	XS	28000	mg/Kg-dry	1	10/29/2013 15:40	93103
Lead	NELAP	2	4		14.4	mg/Kg-dry	1	10/29/2013 15:40	93103
Magnesium	NELAP	0.5	1	S	4570	mg/Kg-dry	1	10/29/2013 15:40	93103
Manganese	NELAP	0.25	0.5		384	mg/Kg-dry	1	10/29/2013 15:40	93103
Nickel	NELAP	0.5	1		19.6	mg/Kg-dry	1	10/29/2013 15:40	93103
Potassium	NELAP	25	50	S	1520	mg/Kg-dry	5	10/30/2013 14:48	93103
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	10/29/2013 15:40	93103

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-009

Client Sample ID: 2396-3-B01

Matrix: SOLID

Collection Date: 10/23/2013 13:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Sodium	NELAP	2.5	5	S	3980	mg/Kg-dry	1	10/29/2013 15:40	93103
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	10/29/2013 15:40	93103
Vanadium	NELAP	0.5	1		47.1	mg/Kg-dry	1	10/29/2013 15:40	93103
Zinc	NELAP	0.5	1		53	mg/Kg-dry	1	10/29/2013 15:40	93103
<i>MS QC limits for K are not applicable due to high sample/spike ratio.</i>									
<i>MS QC limits for Ca, Fe, Mg, and Na are not applicable due to high sample/spike ratio.</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.35	0.6	S	< 0.6	mg/Kg-dry	1	11/01/2013 8:57	93104
<i>Se - Matrix interference present in sample. Confirmed by bench spike.</i>									
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.047	mg/Kg-dry	1	10/28/2013 10:35	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.164	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
1,2-Dichlorobenzene	NELAP	0.196	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
1,3-Dichlorobenzene	NELAP	0.207	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
1,4-Dichlorobenzene	NELAP	0.196	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
2,4,5-Trichlorophenol	NELAP	0.117	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
2,4,6-Trichlorophenol	NELAP	0.156	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
2,4-Dichlorophenol	NELAP	0.149	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
2,4-Dimethylphenol	NELAP	0.157	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
2,4-Dinitrophenol	NELAP	0.132	1.23		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
2,4-Dinitrotoluene	NELAP	0.128	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
2,6-Dinitrotoluene	NELAP	0.133	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
2-Chloronaphthalene	NELAP	0.148	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
2-Chlorophenol	NELAP	0.157	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
2-Methylnaphthalene	NELAP	0.147	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
2-Nitroaniline	NELAP	0.112	1.23		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
2-Nitrophenol	NELAP	0.138	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
3,3'-Dichlorobenzidine	NELAP	0.247	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
3-Nitroaniline	NELAP	0.101	1.23		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
4,6-Dinitro-2-methylphenol	NELAP	0.133	1.23		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
4-Bromophenyl phenyl ether	NELAP	0.114	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
4-Chloro-3-methylphenol	NELAP	0.136	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
4-Chloroaniline	NELAP	0.149	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
4-Chlorophenyl phenyl ether	NELAP	0.122	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
4-Nitroaniline	NELAP	0.112	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
4-Nitrophenol	NELAP	0.121	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Acenaphthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Acenaphthylene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Benzo(a)anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Benzo(a)pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Benzo(b)fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Benzo(g,h,i)perylene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Benzo(k)fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Bis(2-chloroethoxy)methane	NELAP	0.144	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Bis(2-chloroethyl)ether	NELAP	0.175	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-009

Client Sample ID: 2396-3-B01

Matrix: SOLID

Collection Date: 10/23/2013 13:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bis(2-chloroisopropyl)ether	NELAP	0.141	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.144	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Butyl benzyl phthalate	NELAP	0.125	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Carbazole		0.151	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Chrysene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Dibenzo(a,h)anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Dibenzofuran	NELAP	0.156	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Diethyl phthalate	NELAP	0.119	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Dimethyl phthalate	NELAP	0.112	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Di-n-butyl phthalate	NELAP	0.127	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Di-n-octyl phthalate	NELAP	0.128	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Fluorene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Hexachlorobenzene	NELAP	0.121	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Hexachlorobutadiene	NELAP	0.191	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Hexachlorocyclopentadiene	NELAP	0.126	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Hexachloroethane	NELAP	0.206	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Isophorone	NELAP	0.146	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
m,p-Cresol	NELAP	0.156	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Naphthalene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Nitrobenzene	NELAP	0.154	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
N-Nitroso-di-n-propylamine	NELAP	0.136	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
N-Nitrosodiphenylamine	NELAP	0.114	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
o-Cresol	NELAP	0.146	0.617		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Pentachlorophenol	NELAP	0.815	2.47		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Phenanthrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Phenol	NELAP	0.143	0.432		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/03/2013 22:34	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		72.4	%REC	1	11/03/2013 22:34	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		65	%REC	1	11/03/2013 22:34	93100
Surr: 2-Fluorophenol		0	30.5-99		73	%REC	1	11/03/2013 22:34	93100
Surr: Nitrobenzene-d5		0	34.1-101		66.2	%REC	1	11/03/2013 22:34	93100
Surr: Phenol-d5		0	34.9-110		80.6	%REC	1	11/03/2013 22:34	93100
Surr: p-Terphenyl-d14		0	41.7-124		75.2	%REC	1	11/03/2013 22:34	93100

4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
1,1,2,2-Tetrachloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
1,1,2-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
1,1-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
1,1-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
1,2-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
1,2-Dichloropropane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
1,3-Dichloropropene, Total		0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
2-Butanone	NELAP	0.0092	0.046	J	0.035	mg/Kg-dry	1	10/28/2013 14:13	93156
2-Hexanone	NELAP	0.0092	0.046		ND	mg/Kg-dry	1	10/28/2013 14:13	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-009

Client Sample ID: 2396-3-B01

Matrix: SOLID

Collection Date: 10/23/2013 13:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
4-Methyl-2-pentanone	NELAP	0.0092	0.046		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Acetone	NELAP	0.0092	0.046		0.131	mg/Kg-dry	1	10/28/2013 14:13	93156
Benzene	NELAP	0.0005	0.001		0.002	mg/Kg-dry	1	10/28/2013 14:13	93156
Bromodichloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Bromoform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Bromomethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Carbon disulfide	NELAP	0.0028	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Carbon tetrachloride	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Chlorobenzene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Chloroethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Chloroform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Chloromethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
cis-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
cis-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Dibromochloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Ethylbenzene	NELAP	0.0009	0.005	J	0.002	mg/Kg-dry	1	10/28/2013 14:13	93156
m,p-Xylenes	NELAP	0.0009	0.005	J	0.003	mg/Kg-dry	1	10/28/2013 14:13	93156
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Methylene chloride	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
o-Xylene	NELAP	0.0009	0.005	J	0.001	mg/Kg-dry	1	10/28/2013 14:13	93156
Styrene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Tetrachloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Toluene	NELAP	0.0009	0.005	J	0.004	mg/Kg-dry	1	10/28/2013 14:13	93156
trans-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
trans-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Trichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Vinyl acetate	NELAP	0.0184	0.046		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 14:13	93156
Xylenes, Total	NELAP	0.0009	0.005		0.005	mg/Kg-dry	1	10/28/2013 14:13	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		88.3	%REC	1	10/28/2013 14:13	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		114.9	%REC	1	10/28/2013 14:13	93156
Surr: Dibromofluoromethane		0	77.7-120		96.2	%REC	1	10/28/2013 14:13	93156
Surr: Toluene-d8		0	86-116		107.6	%REC	1	10/28/2013 14:13	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-010

Client Sample ID: 2396-3-B02

Matrix: SOLID

Collection Date: 10/23/2013 7:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		22.2	%	1	10/25/2013 15:35	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		77.8	%	1	10/25/2013 15:35	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.03		1	10/25/2013 19:21	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	11/01/2013 12:14	93269
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	11/01/2013 12:14	93269
Manganese	NELAP	0.0016	0.005		4.79	mg/L	1	11/01/2013 12:14	93269
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.287	mg/L	1	10/29/2013 16:21	93140
Beryllium	NELAP	0.0003	0.001	J	0.0006	mg/L	1	10/29/2013 16:21	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 16:21	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 16:21	93140
Chromium	NELAP	0.004	0.01		0.0395	mg/L	1	10/29/2013 16:21	93140
Cobalt	NELAP	0.0022	0.01	J	0.0058	mg/L	1	10/29/2013 16:21	93140
Iron	NELAP	0.007	0.02	X	36	mg/L	1	10/29/2013 16:21	93140
Lead	NELAP	0.006	0.007	X	0.0097	mg/L	1	10/29/2013 16:21	93140
Manganese	NELAP	0.0016	0.005	X	0.181	mg/L	1	10/29/2013 16:21	93140
Nickel	NELAP	0.0033	0.01		0.024	mg/L	1	10/29/2013 16:21	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 16:21	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 16:21	93140
Zinc	NELAP	0.0021	0.01		0.0772	mg/L	1	10/29/2013 16:21	93140
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	10/30/2013 12:51	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 16:47	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002	J	0.00006	mg/L	1	10/29/2013 14:39	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	10/29/2013 20:49	93105
Arsenic	NELAP	1.18	2.36		10	mg/Kg-dry	1	10/29/2013 15:58	93103
Barium	NELAP	0.24	0.47		116	mg/Kg-dry	1	10/29/2013 15:58	93103
Beryllium	NELAP	0.05	0.09		0.89	mg/Kg-dry	1	10/29/2013 15:58	93103
Boron	NELAP	0.94	1.89		3.43	mg/Kg-dry	1	10/29/2013 15:58	93103
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	10/29/2013 15:58	93103
Calcium	NELAP	2.36	4.72		2260	mg/Kg-dry	1	10/29/2013 15:58	93103
Chromium	NELAP	0.47	0.94	X	30.1	mg/Kg-dry	1	10/29/2013 15:58	93103
Cobalt	NELAP	0.47	0.94		8.48	mg/Kg-dry	1	10/29/2013 15:58	93103
Copper	NELAP	0.47	0.94		19.7	mg/Kg-dry	1	10/29/2013 15:58	93103
Iron	NELAP	0.94	1.89	X	29000	mg/Kg-dry	1	10/29/2013 15:58	93103
Lead	NELAP	1.89	3.77		17.9	mg/Kg-dry	1	10/29/2013 15:58	93103
Magnesium	NELAP	0.47	0.94		4400	mg/Kg-dry	1	10/29/2013 15:58	93103
Manganese	NELAP	0.24	0.47		513	mg/Kg-dry	1	10/29/2013 15:58	93103
Nickel	NELAP	0.47	0.94		21.1	mg/Kg-dry	1	10/29/2013 15:58	93103
Potassium	NELAP	4.72	9.43		2060	mg/Kg-dry	1	10/29/2013 15:58	93103
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	10/29/2013 15:58	93103

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-010

Client Sample ID: 2396-3-B02

Matrix: SOLID

Collection Date: 10/23/2013 7:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Sodium	NELAP	2.36	4.72		4820	mg/Kg-dry	1	10/29/2013 15:58	93103
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	10/29/2013 15:58	93103
Vanadium	NELAP	0.47	0.94		50.4	mg/Kg-dry	1	10/29/2013 15:58	93103
Zinc	NELAP	0.47	0.94		57	mg/Kg-dry	1	10/29/2013 15:58	93103
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.318	0.545		< 0.545	mg/Kg-dry	1	10/31/2013 16:32	93104
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.049	mg/Kg-dry	1	10/28/2013 10:42	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.169	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
1,2-Dichlorobenzene	NELAP	0.202	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
1,3-Dichlorobenzene	NELAP	0.214	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
1,4-Dichlorobenzene	NELAP	0.202	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
2,4,5-Trichlorophenol	NELAP	0.121	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
2,4,6-Trichlorophenol	NELAP	0.16	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
2,4-Dichlorophenol	NELAP	0.154	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
2,4-Dimethylphenol	NELAP	0.162	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
2,4-Dinitrophenol	NELAP	0.136	1.27		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
2,4-Dinitrotoluene	NELAP	0.132	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
2,6-Dinitrotoluene	NELAP	0.137	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
2-Chloronaphthalene	NELAP	0.153	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
2-Chlorophenol	NELAP	0.162	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
2-Methylnaphthalene	NELAP	0.151	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
2-Nitroaniline	NELAP	0.116	1.27		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
2-Nitrophenol	NELAP	0.143	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
3,3'-Dichlorobenzidine	NELAP	0.254	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
3-Nitroaniline	NELAP	0.104	1.27		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
4,6-Dinitro-2-methylphenol	NELAP	0.137	1.27		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
4-Bromophenyl phenyl ether	NELAP	0.117	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
4-Chloro-3-methylphenol	NELAP	0.14	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
4-Chloroaniline	NELAP	0.154	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
4-Chlorophenyl phenyl ether	NELAP	0.126	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
4-Nitroaniline	NELAP	0.116	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
4-Nitrophenol	NELAP	0.125	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Acenaphthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Acenaphthylene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Anthracene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Benzo(a)anthracene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Benzo(a)pyrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Benzo(b)fluoranthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Benzo(g,h,i)perylene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Benzo(k)fluoranthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Bis(2-chloroethoxy)methane	NELAP	0.149	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Bis(2-chloroethyl)ether	NELAP	0.181	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Bis(2-chloroisopropyl)ether	NELAP	0.145	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.149	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Butyl benzyl phthalate	NELAP	0.129	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-010

Client Sample ID: 2396-3-B02

Matrix: SOLID

Collection Date: 10/23/2013 7:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbazole		0.155	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Chrysene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Dibenzo(a,h)anthracene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Dibenzofuran	NELAP	0.16	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Diethyl phthalate	NELAP	0.122	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Dimethyl phthalate	NELAP	0.116	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Di-n-butyl phthalate	NELAP	0.131	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Di-n-octyl phthalate	NELAP	0.132	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Fluoranthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Fluorene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Hexachlorobenzene	NELAP	0.125	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Hexachlorobutadiene	NELAP	0.197	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Hexachlorocyclopentadiene	NELAP	0.13	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Hexachloroethane	NELAP	0.212	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Isophorone	NELAP	0.15	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
m,p-Cresol	NELAP	0.16	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Naphthalene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Nitrobenzene	NELAP	0.159	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
N-Nitroso-di-n-propylamine	NELAP	0.14	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
N-Nitrosodiphenylamine	NELAP	0.117	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
o-Cresol	NELAP	0.15	0.636		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Pentachlorophenol	NELAP	0.84	2.54		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Phenanthrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Phenol	NELAP	0.148	0.445		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Pyrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 22:00	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		72.8	%REC	1	11/03/2013 22:00	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		66.3	%REC	1	11/03/2013 22:00	93100
Surr: 2-Fluorophenol		0	30.5-99		67.9	%REC	1	11/03/2013 22:00	93100
Surr: Nitrobenzene-d5		0	34.1-101		65.1	%REC	1	11/03/2013 22:00	93100
Surr: Phenol-d5		0	34.9-110		77.1	%REC	1	11/03/2013 22:00	93100
Surr: p-Terphenyl-d14		0	41.7-124		76.3	%REC	1	11/03/2013 22:00	93100
<i>4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.</i>									
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
1,1,2,2-Tetrachloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
1,1,2-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
1,1-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
1,1-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
1,2-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
1,2-Dichloropropane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
1,3-Dichloropropene, Total		0.001	0.004		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
2-Butanone	NELAP	0.0098	0.049		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
2-Hexanone	NELAP	0.0098	0.049		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
4-Methyl-2-pentanone	NELAP	0.0098	0.049		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Acetone	NELAP	0.0098	0.049	J	0.043	mg/Kg-dry	1	10/28/2013 14:40	93156
Benzene	NELAP	0.0005	0.001		0.001	mg/Kg-dry	1	10/28/2013 14:40	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-010

Client Sample ID: 2396-3-B02

Matrix: SOLID

Collection Date: 10/23/2013 7:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromodichloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Bromoform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Bromomethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Carbon disulfide	NELAP	0.0029	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Carbon tetrachloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Chlorobenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Chloroethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Chloroform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Chloromethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
cis-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
cis-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Dibromochloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Ethylbenzene	NELAP	0.001	0.005	J	0.002	mg/Kg-dry	1	10/28/2013 14:40	93156
m,p-Xylenes	NELAP	0.001	0.005	J	0.003	mg/Kg-dry	1	10/28/2013 14:40	93156
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Methylene chloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
o-Xylene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Styrene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Tetrachloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Toluene	NELAP	0.001	0.005	J	0.003	mg/Kg-dry	1	10/28/2013 14:40	93156
trans-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
trans-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Trichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Vinyl acetate	NELAP	0.0196	0.049		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 14:40	93156
Xylenes, Total	NELAP	0.001	0.005	J	0.003	mg/Kg-dry	1	10/28/2013 14:40	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		90.5	%REC	1	10/28/2013 14:40	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		96	%REC	1	10/28/2013 14:40	93156
Surr: Dibromofluoromethane		0	77.7-120		94.9	%REC	1	10/28/2013 14:40	93156
Surr: Toluene-d8		0	86-116		99.5	%REC	1	10/28/2013 14:40	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-011

Client Sample ID: 2396-3-B03

Matrix: SOLID

Collection Date: 10/23/2013 8:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		10.5	%	1	10/25/2013 15:36	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		89.5	%	1	10/25/2013 15:36	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.1		1	10/25/2013 19:24	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		0.158	mg/L	1	11/01/2013 10:40	93273
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.147	mg/L	1	10/29/2013 16:24	93140
Beryllium	NELAP	0.0003	0.001	J	0.0004	mg/L	1	10/29/2013 16:24	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 16:24	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 16:24	93140
Chromium	NELAP	0.004	0.01		0.0151	mg/L	1	10/29/2013 16:24	93140
Cobalt	NELAP	0.0022	0.01	J	0.0033	mg/L	1	10/29/2013 16:24	93140
Iron	NELAP	0.007	0.02	X	13.2	mg/L	1	10/29/2013 16:24	93140
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 16:24	93140
Manganese	NELAP	0.0016	0.005		0.0902	mg/L	1	10/29/2013 16:24	93140
Nickel	NELAP	0.0033	0.01		0.0134	mg/L	1	10/29/2013 16:24	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 16:24	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 16:24	93140
Zinc	NELAP	0.0021	0.01		0.0363	mg/L	1	10/29/2013 16:24	93140
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	10/30/2013 12:55	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 16:50	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 14:41	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	10/29/2013 20:53	93105
Arsenic	NELAP	1.16	2.31		3.65	mg/Kg-dry	1	10/29/2013 16:04	93103
Barium	NELAP	0.23	0.46		52.6	mg/Kg-dry	1	10/29/2013 16:04	93103
Beryllium	NELAP	0.05	0.09		0.42	mg/Kg-dry	1	10/29/2013 16:04	93103
Boron	NELAP	0.93	1.85		10.2	mg/Kg-dry	1	10/29/2013 16:04	93103
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	10/29/2013 16:04	93103
Calcium	NELAP	2.31	4.63		92800	mg/Kg-dry	1	10/29/2013 16:04	93103
Chromium	NELAP	0.46	0.93		12.8	mg/Kg-dry	1	10/29/2013 16:04	93103
Cobalt	NELAP	0.46	0.93		5.32	mg/Kg-dry	1	10/29/2013 16:04	93103
Copper	NELAP	0.46	0.93		12.3	mg/Kg-dry	1	10/29/2013 16:04	93103
Iron	NELAP	0.93	1.85		12700	mg/Kg-dry	1	10/29/2013 16:04	93103
Lead	NELAP	1.85	3.7		5.17	mg/Kg-dry	1	10/29/2013 16:04	93103
Magnesium	NELAP	0.46	0.93		41400	mg/Kg-dry	1	10/29/2013 16:04	93103
Manganese	NELAP	0.23	0.46		333	mg/Kg-dry	1	10/29/2013 16:04	93103
Nickel	NELAP	0.46	0.93		13.2	mg/Kg-dry	1	10/29/2013 16:04	93103
Potassium	NELAP	4.63	9.26		2330	mg/Kg-dry	1	10/29/2013 16:04	93103
Silver	NELAP	0.46	0.51		< 0.51	mg/Kg-dry	1	10/29/2013 16:04	93103
Sodium	NELAP	2.31	4.63		405	mg/Kg-dry	1	10/29/2013 16:04	93103
Thallium	NELAP	2.31	2.41		< 2.41	mg/Kg-dry	1	10/29/2013 16:04	93103

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-011

Client Sample ID: 2396-3-B03

Matrix: SOLID

Collection Date: 10/23/2013 8:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.46	0.93		18.8	mg/Kg-dry	1	10/29/2013 16:04	93103
Zinc	NELAP	0.46	0.93		27.9	mg/Kg-dry	1	10/29/2013 16:04	93103
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.337	0.577		< 0.577	mg/Kg-dry	1	10/31/2013 16:35	93104
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.014	mg/Kg-dry	1	10/28/2013 10:44	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.148	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
1,2-Dichlorobenzene	NELAP	0.177	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
1,3-Dichlorobenzene	NELAP	0.187	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
1,4-Dichlorobenzene	NELAP	0.177	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
2,4,5-Trichlorophenol	NELAP	0.106	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
2,4,6-Trichlorophenol	NELAP	0.14	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
2,4-Dichlorophenol	NELAP	0.135	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
2,4-Dimethylphenol	NELAP	0.142	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
2,4-Dinitrophenol	NELAP	0.119	1.11		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
2,4-Dinitrotoluene	NELAP	0.116	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
2,6-Dinitrotoluene	NELAP	0.12	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
2-Chloronaphthalene	NELAP	0.134	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
2-Chlorophenol	NELAP	0.142	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
2-Methylnaphthalene	NELAP	0.133	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
2-Nitroaniline	NELAP	0.101	1.11		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
2-Nitrophenol	NELAP	0.125	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
3,3'-Dichlorobenzidine	NELAP	0.223	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
3-Nitroaniline	NELAP	0.091	1.11		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
4,6-Dinitro-2-methylphenol	NELAP	0.12	1.11		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
4-Bromophenyl phenyl ether	NELAP	0.103	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
4-Chloro-3-methylphenol	NELAP	0.123	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
4-Chloroaniline	NELAP	0.135	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
4-Chlorophenyl phenyl ether	NELAP	0.11	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
4-Nitroaniline	NELAP	0.101	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
4-Nitrophenol	NELAP	0.109	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Acenaphthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Acenaphthylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Benzo(a)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Benzo(a)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Benzo(b)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Benzo(g,h,i)perylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Benzo(k)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Bis(2-chloroethoxy)methane	NELAP	0.13	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Bis(2-chloroethyl)ether	NELAP	0.158	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Bis(2-chloroisopropyl)ether	NELAP	0.127	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.13	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Butyl benzyl phthalate	NELAP	0.113	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Carbazole		0.136	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Chrysene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-011

Client Sample ID: 2396-3-B03

Matrix: SOLID

Collection Date: 10/23/2013 8:05

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	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Dibenzofuran	NELAP	0.14	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Diethyl phthalate	NELAP	0.107	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Dimethyl phthalate	NELAP	0.101	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Di-n-butyl phthalate	NELAP	0.115	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Di-n-octyl phthalate	NELAP	0.116	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Fluorene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Hexachlorobenzene	NELAP	0.109	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Hexachlorobutadiene	NELAP	0.173	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Hexachlorocyclopentadiene	NELAP	0.114	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Hexachloroethane	NELAP	0.186	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Isophorone	NELAP	0.132	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
m,p-Cresol	NELAP	0.14	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Naphthalene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Nitrobenzene	NELAP	0.139	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
N-Nitroso-di-n-propylamine	NELAP	0.123	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
N-Nitrosodiphenylamine	NELAP	0.103	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
o-Cresol	NELAP	0.132	0.557		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Pentachlorophenol	NELAP	0.736	2.23		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Phenanthrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Phenol	NELAP	0.129	0.39		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 15:48	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		62.2	%REC	1	11/03/2013 15:48	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		50.3	%REC	1	11/03/2013 15:48	93100
Surr: 2-Fluorophenol		0	30.5-99		48	%REC	1	11/03/2013 15:48	93100
Surr: Nitrobenzene-d5		0	34.1-101		46.2	%REC	1	11/03/2013 15:48	93100
Surr: Phenol-d5		0	34.9-110		56.7	%REC	1	11/03/2013 15:48	93100
Surr: p-Terphenyl-d14		0	41.7-124		71.4	%REC	1	11/03/2013 15:48	93100
<i>4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.</i>									
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
2-Butanone	NELAP	0.0081	0.04		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
2-Hexanone	NELAP	0.0081	0.04		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
4-Methyl-2-pentanone	NELAP	0.0081	0.04		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Acetone	NELAP	0.0081	0.04	J	0.023	mg/Kg-dry	1	10/28/2013 15:06	93156
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-011

Client Sample ID: 2396-3-B03

Matrix: SOLID

Collection Date: 10/23/2013 8:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Carbon disulfide	NELAP	0.0024	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Chloroethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Chloromethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Ethylbenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
m,p-Xylenes	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Toluene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Vinyl acetate	NELAP	0.0162	0.04		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Xylenes, Total	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 15:06	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		91.6	%REC	1	10/28/2013 15:06	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		99.7	%REC	1	10/28/2013 15:06	93156
Surr: Dibromofluoromethane		0	77.7-120		95.4	%REC	1	10/28/2013 15:06	93156
Surr: Toluene-d8		0	86-116		99.5	%REC	1	10/28/2013 15:06	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-012

Client Sample ID: 2396-3-B04

Matrix: SOLID

Collection Date: 10/23/2013 8:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		10.5	%	1	10/25/2013 15:36	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		89.5	%	1	10/25/2013 15:36	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.09		1	10/25/2013 19:27	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	11/01/2013 10:58	93273
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.122	mg/L	1	10/29/2013 16:28	93140
Beryllium	NELAP	0.0003	0.001	J	0.0003	mg/L	1	10/29/2013 16:28	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 16:28	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 16:28	93140
Chromium	NELAP	0.004	0.01		0.0124	mg/L	1	10/29/2013 16:28	93140
Cobalt	NELAP	0.0022	0.01	J	0.0023	mg/L	1	10/29/2013 16:28	93140
Iron	NELAP	0.007	0.02	X	9.59	mg/L	1	10/29/2013 16:28	93140
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 16:28	93140
Manganese	NELAP	0.0016	0.005		0.0495	mg/L	1	10/29/2013 16:28	93140
Nickel	NELAP	0.0033	0.01	J	0.0096	mg/L	1	10/29/2013 16:28	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 16:28	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 16:28	93140
Zinc	NELAP	0.0021	0.01		0.0249	mg/L	1	10/29/2013 16:28	93140
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	10/30/2013 12:59	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 16:54	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 14:48	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.41	4.63		< 4.63	mg/Kg-dry	1	10/29/2013 21:04	93105
Arsenic	NELAP	1.18	2.36		4.1	mg/Kg-dry	1	10/29/2013 16:10	93103
Barium	NELAP	0.24	0.47		67	mg/Kg-dry	1	10/29/2013 16:10	93103
Beryllium	NELAP	0.05	0.09		0.44	mg/Kg-dry	1	10/29/2013 16:10	93103
Boron	NELAP	0.94	1.89		9.14	mg/Kg-dry	1	10/29/2013 16:10	93103
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	10/29/2013 16:10	93103
Calcium	NELAP	2.36	4.72		65800	mg/Kg-dry	1	10/29/2013 16:10	93103
Chromium	NELAP	0.47	0.94	X	14.5	mg/Kg-dry	1	10/29/2013 16:10	93103
Cobalt	NELAP	0.47	0.94		5.9	mg/Kg-dry	1	10/29/2013 16:10	93103
Copper	NELAP	0.47	0.94		13.6	mg/Kg-dry	1	10/29/2013 16:10	93103
Iron	NELAP	0.94	1.89		14500	mg/Kg-dry	1	10/29/2013 16:10	93103
Lead	NELAP	1.89	3.77		6.14	mg/Kg-dry	1	10/29/2013 16:10	93103
Magnesium	NELAP	0.47	0.94		35600	mg/Kg-dry	1	10/29/2013 16:10	93103
Manganese	NELAP	0.24	0.47		310	mg/Kg-dry	1	10/29/2013 16:10	93103
Nickel	NELAP	0.47	0.94		14.6	mg/Kg-dry	1	10/29/2013 16:10	93103
Potassium	NELAP	4.72	9.43		2030	mg/Kg-dry	1	10/29/2013 16:10	93103
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	10/29/2013 16:10	93103
Sodium	NELAP	2.36	4.72		401	mg/Kg-dry	1	10/29/2013 16:10	93103
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	10/29/2013 16:10	93103

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-012

Client Sample ID: 2396-3-B04

Matrix: SOLID

Collection Date: 10/23/2013 8:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.47	0.94		20.2	mg/Kg-dry	1	10/29/2013 16:10	93103
Zinc	NELAP	0.47	0.94		28.2	mg/Kg-dry	1	10/29/2013 16:10	93103
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.33	0.566		< 0.566	mg/Kg-dry	1	10/31/2013 16:39	93104
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.015	mg/Kg-dry	1	10/28/2013 10:46	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.146	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
1,2-Dichlorobenzene	NELAP	0.175	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
1,3-Dichlorobenzene	NELAP	0.185	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
1,4-Dichlorobenzene	NELAP	0.175	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
2,4,5-Trichlorophenol	NELAP	0.105	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
2,4,6-Trichlorophenol	NELAP	0.139	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
2,4-Dichlorophenol	NELAP	0.133	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
2,4-Dimethylphenol	NELAP	0.14	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
2,4-Dinitrophenol	NELAP	0.118	1.1		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
2,4-Dinitrotoluene	NELAP	0.114	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
2,6-Dinitrotoluene	NELAP	0.119	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
2-Chloronaphthalene	NELAP	0.132	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
2-Chlorophenol	NELAP	0.14	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
2-Methylnaphthalene	NELAP	0.131	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
2-Nitroaniline	NELAP	0.1	1.1		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
2-Nitrophenol	NELAP	0.123	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
3,3'-Dichlorobenzidine	NELAP	0.22	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
3-Nitroaniline	NELAP	0.09	1.1		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
4,6-Dinitro-2-methylphenol	NELAP	0.119	1.1		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
4-Bromophenyl phenyl ether	NELAP	0.101	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
4-Chloro-3-methylphenol	NELAP	0.121	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
4-Chloroaniline	NELAP	0.133	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
4-Chlorophenyl phenyl ether	NELAP	0.109	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
4-Nitroaniline	NELAP	0.1	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
4-Nitrophenol	NELAP	0.108	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Acenaphthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Acenaphthylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Benzo(a)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Benzo(a)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Benzo(b)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Benzo(g,h,i)perylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Benzo(k)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Bis(2-chloroethoxy)methane	NELAP	0.129	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Bis(2-chloroethyl)ether	NELAP	0.156	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Bis(2-chloroisopropyl)ether	NELAP	0.125	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.129	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Butyl benzyl phthalate	NELAP	0.111	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Carbazole		0.134	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Chrysene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-012

Client Sample ID: 2396-3-B04

Matrix: SOLID

Collection Date: 10/23/2013 8:30

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	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Dibenzofuran	NELAP	0.139	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Diethyl phthalate	NELAP	0.106	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Dimethyl phthalate	NELAP	0.1	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Di-n-butyl phthalate	NELAP	0.113	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Di-n-octyl phthalate	NELAP	0.114	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Fluorene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Hexachlorobenzene	NELAP	0.108	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Hexachlorobutadiene	NELAP	0.171	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Hexachlorocyclopentadiene	NELAP	0.112	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Hexachloroethane	NELAP	0.184	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Isophorone	NELAP	0.13	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
m,p-Cresol	NELAP	0.139	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Naphthalene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Nitrobenzene	NELAP	0.138	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
N-Nitroso-di-n-propylamine	NELAP	0.121	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
N-Nitrosodiphenylamine	NELAP	0.101	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
o-Cresol	NELAP	0.13	0.55		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Pentachlorophenol	NELAP	0.726	2.2		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Phenanthrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Phenol	NELAP	0.128	0.385		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 16:22	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		67.2	%REC	1	11/03/2013 16:22	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		60.7	%REC	1	11/03/2013 16:22	93100
Surr: 2-Fluorophenol		0	30.5-99		61	%REC	1	11/03/2013 16:22	93100
Surr: Nitrobenzene-d5		0	34.1-101		57.5	%REC	1	11/03/2013 16:22	93100
Surr: Phenol-d5		0	34.9-110		67.9	%REC	1	11/03/2013 16:22	93100
Surr: p-Terphenyl-d14		0	41.7-124		73	%REC	1	11/03/2013 16:22	93100
<i>4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.</i>									
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
1,1,1,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
2-Butanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
2-Hexanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
4-Methyl-2-pentanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Acetone	NELAP	0.0074	0.037	J	0.017	mg/Kg-dry	1	10/28/2013 15:33	93156
Benzene	NELAP	0.0004	0.001		0.003	mg/Kg-dry	1	10/28/2013 15:33	93156
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-012

Client Sample ID: 2396-3-B04

Matrix: SOLID

Collection Date: 10/23/2013 8:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Carbon disulfide	NELAP	0.0022	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Chlorobenzene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Chloroethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Chloromethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Ethylbenzene	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	10/28/2013 15:33	93156
m,p-Xylenes	NELAP	0.0007	0.004	J	0.003	mg/Kg-dry	1	10/28/2013 15:33	93156
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Methylene chloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
o-Xylene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 15:33	93156
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Toluene	NELAP	0.0007	0.004		0.006	mg/Kg-dry	1	10/28/2013 15:33	93156
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Vinyl acetate	NELAP	0.0148	0.037		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/28/2013 15:33	93156
Xylenes, Total	NELAP	0.0007	0.004		0.004	mg/Kg-dry	1	10/28/2013 15:33	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		88	%REC	1	10/28/2013 15:33	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		96	%REC	1	10/28/2013 15:33	93156
Surr: Dibromofluoromethane		0	77.7-120		92.9	%REC	1	10/28/2013 15:33	93156
Surr: Toluene-d8		0	86-116		99.4	%REC	1	10/28/2013 15:33	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-013

Client Sample ID: 2396-3-B05

Matrix: SOLID

Collection Date: 10/23/2013 14:30

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	10/25/2013 15:36	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		79.6	%	1	10/25/2013 15:36	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.62		1	10/25/2013 19:30	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	11/01/2013 12:18	93269
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.04	0.1		0.229	mg/L	2	10/30/2013 9:22	93140
Beryllium	NELAP	0.0003	0.001	J	0.0007	mg/L	1	10/29/2013 16:32	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 16:32	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 16:32	93140
Chromium	NELAP	0.008	0.02		0.0508	mg/L	2	10/30/2013 9:22	93140
Cobalt	NELAP	0.0022	0.01	J	0.004	mg/L	1	10/29/2013 16:32	93140
Iron	NELAP	0.014	0.04	X	35.7	mg/L	2	10/30/2013 9:22	93140
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 16:32	93140
Manganese	NELAP	0.0032	0.01		0.0938	mg/L	2	10/30/2013 9:22	93140
Nickel	NELAP	0.0033	0.01		0.0235	mg/L	1	10/29/2013 16:32	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 16:32	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 16:32	93140
Zinc	NELAP	0.0042	0.02		0.0834	mg/L	2	10/30/2013 9:22	93140
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	10/30/2013 13:03	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 16:57	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002	J	0.00007	mg/L	1	10/29/2013 14:50	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/29/2013 21:15	93105
Arsenic	NELAP	1.25	2.5		8.99	mg/Kg-dry	1	10/29/2013 16:16	93103
Barium	NELAP	0.25	0.5		169	mg/Kg-dry	1	10/29/2013 16:16	93103
Beryllium	NELAP	0.05	0.1		1	mg/Kg-dry	1	10/29/2013 16:16	93103
Boron	NELAP	1	2		3.96	mg/Kg-dry	1	10/29/2013 16:16	93103
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	10/29/2013 16:16	93103
Calcium	NELAP	2.5	5		4260	mg/Kg-dry	1	10/29/2013 16:16	93103
Chromium	NELAP	0.5	1	X	31.8	mg/Kg-dry	1	10/29/2013 16:16	93103
Cobalt	NELAP	0.5	1		7.13	mg/Kg-dry	1	10/29/2013 16:16	93103
Copper	NELAP	0.5	1		20.7	mg/Kg-dry	1	10/29/2013 16:16	93103
Iron	NELAP	1	2	X	29000	mg/Kg-dry	1	10/29/2013 16:16	93103
Lead	NELAP	2	4		11.7	mg/Kg-dry	1	10/29/2013 16:16	93103
Magnesium	NELAP	0.5	1		5140	mg/Kg-dry	1	10/29/2013 16:16	93103
Manganese	NELAP	0.25	0.5		369	mg/Kg-dry	1	10/29/2013 16:16	93103
Nickel	NELAP	0.5	1		24.8	mg/Kg-dry	1	10/29/2013 16:16	93103
Potassium	NELAP	5	10		1880	mg/Kg-dry	1	10/29/2013 16:16	93103
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	10/29/2013 16:16	93103
Sodium	NELAP	2.5	5		1780	mg/Kg-dry	1	10/29/2013 16:16	93103
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	10/29/2013 16:16	93103

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-013

Client Sample ID: 2396-3-B05

Matrix: SOLID

Collection Date: 10/23/2013 14:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.5	1		51.7	mg/Kg-dry	1	10/29/2013 16:16	93103
Zinc	NELAP	0.5	1		58.8	mg/Kg-dry	1	10/29/2013 16:16	93103
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.35	0.6		< 0.6	mg/Kg-dry	1	10/31/2013 16:42	93104
SW-846 7471B									
Mercury	NELAP	0.003	0.013		0.056	mg/Kg-dry	1	10/28/2013 10:49	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.167	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
1,2-Dichlorobenzene	NELAP	0.2	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
1,3-Dichlorobenzene	NELAP	0.211	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
1,4-Dichlorobenzene	NELAP	0.2	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
2,4,5-Trichlorophenol	NELAP	0.12	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
2,4,6-Trichlorophenol	NELAP	0.159	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
2,4-Dichlorophenol	NELAP	0.152	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
2,4-Dimethylphenol	NELAP	0.16	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
2,4-Dinitrophenol	NELAP	0.135	1.26		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
2,4-Dinitrotoluene	NELAP	0.131	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
2,6-Dinitrotoluene	NELAP	0.136	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
2-Chloronaphthalene	NELAP	0.151	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
2-Chlorophenol	NELAP	0.16	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
2-Methylnaphthalene	NELAP	0.15	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
2-Nitroaniline	NELAP	0.114	1.26		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
2-Nitrophenol	NELAP	0.141	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
3,3'-Dichlorobenzidine	NELAP	0.252	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
3-Nitroaniline	NELAP	0.103	1.26		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
4,6-Dinitro-2-methylphenol	NELAP	0.136	1.26		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
4-Bromophenyl phenyl ether	NELAP	0.116	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
4-Chloro-3-methylphenol	NELAP	0.138	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
4-Chloroaniline	NELAP	0.152	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
4-Chlorophenyl phenyl ether	NELAP	0.125	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
4-Nitroaniline	NELAP	0.114	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
4-Nitrophenol	NELAP	0.123	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Acenaphthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Acenaphthylene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Anthracene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Benzo(a)anthracene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Benzo(a)pyrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Benzo(b)fluoranthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Benzo(g,h,i)perylene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Benzo(k)fluoranthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Bis(2-chloroethoxy)methane	NELAP	0.147	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Bis(2-chloroethyl)ether	NELAP	0.179	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Bis(2-chloroisopropyl)ether	NELAP	0.143	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.147	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Butyl benzyl phthalate	NELAP	0.127	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Carbazole		0.153	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Chrysene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100



Laboratory Results

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Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-013

Client Sample ID: 2396-3-B05

Matrix: SOLID

Collection Date: 10/23/2013 14:30

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	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Dibenzofuran	NELAP	0.159	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Diethyl phthalate	NELAP	0.121	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Dimethyl phthalate	NELAP	0.114	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Di-n-butyl phthalate	NELAP	0.13	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Di-n-octyl phthalate	NELAP	0.131	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Fluoranthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Fluorene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Hexachlorobenzene	NELAP	0.123	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Hexachlorobutadiene	NELAP	0.195	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Hexachlorocyclopentadiene	NELAP	0.128	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Hexachloroethane	NELAP	0.21	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Isophorone	NELAP	0.148	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
m,p-Cresol	NELAP	0.159	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Naphthalene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Nitrobenzene	NELAP	0.157	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
N-Nitroso-di-n-propylamine	NELAP	0.138	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
N-Nitrosodiphenylamine	NELAP	0.116	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
o-Cresol	NELAP	0.148	0.629		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Pentachlorophenol	NELAP	0.83	2.52		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Phenanthrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Phenol	NELAP	0.146	0.44		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Pyrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 16:56	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		67.6	%REC	1	11/03/2013 16:56	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		61.3	%REC	1	11/03/2013 16:56	93100
Surr: 2-Fluorophenol		0	30.5-99		60.5	%REC	1	11/03/2013 16:56	93100
Surr: Nitrobenzene-d5		0	34.1-101		57.6	%REC	1	11/03/2013 16:56	93100
Surr: Phenol-d5		0	34.9-110		66.8	%REC	1	11/03/2013 16:56	93100
Surr: p-Terphenyl-d14		0	41.7-124		72.8	%REC	1	11/03/2013 16:56	93100

4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
1,1,1,2-Tetrachloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
1,1,2-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
1,1-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
1,1-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
1,2-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
1,2-Dichloropropane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
1,3-Dichloropropene, Total		0.0009	0.003		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
2-Butanone	NELAP	0.0085	0.043		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
2-Hexanone	NELAP	0.0085	0.043		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
4-Methyl-2-pentanone	NELAP	0.0085	0.043		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Acetone	NELAP	0.0085	0.043		0.05	mg/Kg-dry	1	10/28/2013 15:59	93156
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Bromodichloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Bromoform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156



Laboratory Results

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Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-013

Client Sample ID: 2396-3-B05

Matrix: SOLID

Collection Date: 10/23/2013 14:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Carbon disulfide	NELAP	0.0026	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Carbon tetrachloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Chlorobenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Chloroethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Chloroform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Chloromethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
cis-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
cis-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Dibromochloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Ethylbenzene	NELAP	0.0009	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 15:59	93156
m,p-Xylenes	NELAP	0.0009	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 15:59	93156
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Methylene chloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
o-Xylene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Styrene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Tetrachloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Toluene	NELAP	0.0009	0.004	J	0.002	mg/Kg-dry	1	10/28/2013 15:59	93156
trans-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
trans-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Trichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Vinyl acetate	NELAP	0.017	0.043		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/28/2013 15:59	93156
Xylenes, Total	NELAP	0.0009	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 15:59	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		89.7	%REC	1	10/28/2013 15:59	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		99.2	%REC	1	10/28/2013 15:59	93156
Surr: Dibromofluoromethane		0	77.7-120		95.7	%REC	1	10/28/2013 15:59	93156
Surr: Toluene-d8		0	86-116		99.6	%REC	1	10/28/2013 15:59	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-014

Client Sample ID: 2396-3-B08

Matrix: SOLID

Collection Date: 10/23/2013 14:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		12	%	1	10/25/2013 15:36	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		88	%	1	10/25/2013 15:36	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.46		1	10/25/2013 19:32	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		0.034	mg/L	1	11/01/2013 12:21	93269
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.212	mg/L	1	10/29/2013 16:35	93140
Beryllium	NELAP	0.0003	0.001	J	0.0005	mg/L	1	10/29/2013 16:35	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 16:35	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 16:35	93140
Chromium	NELAP	0.004	0.01		0.0273	mg/L	1	10/29/2013 16:35	93140
Cobalt	NELAP	0.0022	0.01	J	0.0049	mg/L	1	10/29/2013 16:35	93140
Iron	NELAP	0.007	0.02	X	23	mg/L	1	10/29/2013 16:35	93140
Lead	NELAP	0.006	0.007	J	0.006	mg/L	1	10/29/2013 16:35	93140
Manganese	NELAP	0.0016	0.005		0.107	mg/L	1	10/29/2013 16:35	93140
Nickel	NELAP	0.0033	0.01		0.0161	mg/L	1	10/29/2013 16:35	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 16:35	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 16:35	93140
Zinc	NELAP	0.0021	0.01		0.0533	mg/L	1	10/29/2013 16:35	93140
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	10/30/2013 13:06	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002	J	0.0006	mg/L	1	10/30/2013 17:01	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 14:52	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/29/2013 21:18	93105
Arsenic	NELAP	1.16	2.31		7.43	mg/Kg-dry	1	10/29/2013 16:23	93103
Barium	NELAP	0.23	0.46		140	mg/Kg-dry	1	10/29/2013 16:23	93103
Beryllium	NELAP	0.05	0.09		0.71	mg/Kg-dry	1	10/29/2013 16:23	93103
Boron	NELAP	0.93	1.85		10.9	mg/Kg-dry	1	10/29/2013 16:23	93103
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	10/29/2013 16:23	93103
Calcium	NELAP	2.31	4.63		3350	mg/Kg-dry	1	10/29/2013 16:23	93103
Chromium	NELAP	0.46	0.93	X	24.6	mg/Kg-dry	1	10/29/2013 16:23	93103
Cobalt	NELAP	0.46	0.93		9.26	mg/Kg-dry	1	10/29/2013 16:23	93103
Copper	NELAP	0.46	0.93		19.5	mg/Kg-dry	1	10/29/2013 16:23	93103
Iron	NELAP	0.93	1.85	X	24500	mg/Kg-dry	1	10/29/2013 16:23	93103
Lead	NELAP	1.85	3.7		9.24	mg/Kg-dry	1	10/29/2013 16:23	93103
Magnesium	NELAP	0.46	0.93		5710	mg/Kg-dry	1	10/29/2013 16:23	93103
Manganese	NELAP	0.23	0.46		522	mg/Kg-dry	1	10/29/2013 16:23	93103
Nickel	NELAP	0.46	0.93		21.5	mg/Kg-dry	1	10/29/2013 16:23	93103
Potassium	NELAP	4.63	9.26		3390	mg/Kg-dry	1	10/29/2013 16:23	93103
Silver	NELAP	0.46	0.51		< 0.51	mg/Kg-dry	1	10/29/2013 16:23	93103
Sodium	NELAP	2.31	4.63		251	mg/Kg-dry	1	10/29/2013 16:23	93103
Thallium	NELAP	2.31	2.41		< 2.41	mg/Kg-dry	1	10/29/2013 16:23	93103



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-014

Client Sample ID: 2396-3-B08

Matrix: SOLID

Collection Date: 10/23/2013 14:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.46	0.93		32.6	mg/Kg-dry	1	10/29/2013 16:23	93103
Zinc	NELAP	0.46	0.93		50	mg/Kg-dry	1	10/29/2013 16:23	93103
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.35	0.6		< 0.6	mg/Kg-dry	1	10/31/2013 16:46	93104
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.024	mg/Kg-dry	1	10/28/2013 10:51	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.15	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
1,2-Dichlorobenzene	NELAP	0.18	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
1,3-Dichlorobenzene	NELAP	0.19	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
1,4-Dichlorobenzene	NELAP	0.18	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
2,4,5-Trichlorophenol	NELAP	0.107	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
2,4,6-Trichlorophenol	NELAP	0.143	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
2,4-Dichlorophenol	NELAP	0.137	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
2,4-Dimethylphenol	NELAP	0.144	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
2,4-Dinitrophenol	NELAP	0.121	1.13		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
2,4-Dinitrotoluene	NELAP	0.118	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
2,6-Dinitrotoluene	NELAP	0.122	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
2-Chloronaphthalene	NELAP	0.136	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
2-Chlorophenol	NELAP	0.144	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
2-Methylnaphthalene	NELAP	0.135	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
2-Nitroaniline	NELAP	0.103	1.13		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
2-Nitrophenol	NELAP	0.127	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
3,3'-Dichlorobenzidine	NELAP	0.226	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
3-Nitroaniline	NELAP	0.093	1.13		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
4,6-Dinitro-2-methylphenol	NELAP	0.122	1.13		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
4-Bromophenyl phenyl ether	NELAP	0.104	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
4-Chloro-3-methylphenol	NELAP	0.124	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
4-Chloroaniline	NELAP	0.137	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
4-Chlorophenyl phenyl ether	NELAP	0.112	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
4-Nitroaniline	NELAP	0.103	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
4-Nitrophenol	NELAP	0.111	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Acenaphthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Acenaphthylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Benzo(a)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Benzo(a)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Benzo(b)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Benzo(g,h,i)perylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Benzo(k)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Bis(2-chloroethoxy)methane	NELAP	0.132	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Bis(2-chloroethyl)ether	NELAP	0.161	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Bis(2-chloroisopropyl)ether	NELAP	0.129	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.132	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Butyl benzyl phthalate	NELAP	0.114	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Carbazole		0.138	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Chrysene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-014

Client Sample ID: 2396-3-B08

Matrix: SOLID

Collection Date: 10/23/2013 14:40

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	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Dibenzofuran	NELAP	0.143	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Diethyl phthalate	NELAP	0.109	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Dimethyl phthalate	NELAP	0.103	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Di-n-butyl phthalate	NELAP	0.117	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Di-n-octyl phthalate	NELAP	0.118	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Fluorene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Hexachlorobenzene	NELAP	0.111	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Hexachlorobutadiene	NELAP	0.175	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Hexachlorocyclopentadiene	NELAP	0.115	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Hexachloroethane	NELAP	0.189	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Isophorone	NELAP	0.133	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
m,p-Cresol	NELAP	0.143	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Naphthalene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Nitrobenzene	NELAP	0.141	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
N-Nitroso-di-n-propylamine	NELAP	0.124	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
N-Nitrosodiphenylamine	NELAP	0.104	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
o-Cresol	NELAP	0.133	0.566		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Pentachlorophenol	NELAP	0.747	2.26		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Phenanthrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Phenol	NELAP	0.131	0.396		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 17:30	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		68.8	%REC	1	11/03/2013 17:30	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		62.9	%REC	1	11/03/2013 17:30	93100
Surr: 2-Fluorophenol		0	30.5-99		62.3	%REC	1	11/03/2013 17:30	93100
Surr: Nitrobenzene-d5		0	34.1-101		60.1	%REC	1	11/03/2013 17:30	93100
Surr: Phenol-d5		0	34.9-110		69.8	%REC	1	11/03/2013 17:30	93100
Surr: p-Terphenyl-d14		0	41.7-124		72.4	%REC	1	11/03/2013 17:30	93100
<i>4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.</i>									
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
1,1,1,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
2-Butanone	NELAP	0.008	0.04		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
2-Hexanone	NELAP	0.008	0.04		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
4-Methyl-2-pentanone	NELAP	0.008	0.04		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Acetone	NELAP	0.008	0.04	J	0.029	mg/Kg-dry	1	10/28/2013 16:26	93156
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156



Laboratory Results

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Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-014

Client Sample ID: 2396-3-B08

Matrix: SOLID

Collection Date: 10/23/2013 14:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Carbon disulfide	NELAP	0.0024	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Chloroethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Chloromethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Ethylbenzene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 16:26	93156
m,p-Xylenes	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 16:26	93156
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Toluene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 16:26	93156
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Vinyl acetate	NELAP	0.016	0.04		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/28/2013 16:26	93156
Xylenes, Total	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 16:26	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		90.1	%REC	1	10/28/2013 16:26	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		99.3	%REC	1	10/28/2013 16:26	93156
Surr: Dibromofluoromethane		0	77.7-120		96.7	%REC	1	10/28/2013 16:26	93156
Surr: Toluene-d8		0	86-116		100.2	%REC	1	10/28/2013 16:26	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-015

Client Sample ID: 2396-3-B19

Matrix: SOLID

Collection Date: 10/23/2013 15:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		20.2	%	1	10/25/2013 15:37	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		79.8	%	1	10/25/2013 15:37	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.13		1	10/25/2013 19:39	R183256
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0791	mg/L	1	10/29/2013 16:54	93144
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 16:54	93144
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 16:54	93144
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 16:54	93144
Chromium	NELAP	0.004	0.01	J	0.0062	mg/L	1	10/29/2013 16:54	93144
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 16:54	93144
Iron	NELAP	0.007	0.02		4.39	mg/L	1	10/29/2013 16:54	93144
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 16:54	93144
Manganese	NELAP	0.0016	0.005		0.0101	mg/L	1	10/29/2013 16:54	93144
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	10/29/2013 16:54	93144
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 16:54	93144
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 16:54	93144
Zinc	NELAP	0.0021	0.01		0.0139	mg/L	1	10/29/2013 16:54	93144
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	10/30/2013 13:40	93146
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 17:11	93146
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 14:59	93154
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	10/29/2013 21:22	93105
Arsenic	NELAP	1.25	2.5		4.9	mg/Kg-dry	1	10/29/2013 16:29	93103
Barium	NELAP	0.25	0.5		173	mg/Kg-dry	1	10/29/2013 16:29	93103
Beryllium	NELAP	0.05	0.1		0.94	mg/Kg-dry	1	10/29/2013 16:29	93103
Boron	NELAP	1	2		2.53	mg/Kg-dry	1	10/29/2013 16:29	93103
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	10/29/2013 16:29	93103
Calcium	NELAP	2.5	5		4710	mg/Kg-dry	1	10/29/2013 16:29	93103
Chromium	NELAP	0.5	1	X	27.4	mg/Kg-dry	1	10/29/2013 16:29	93103
Cobalt	NELAP	0.5	1		5.24	mg/Kg-dry	1	10/29/2013 16:29	93103
Copper	NELAP	0.5	1		20.2	mg/Kg-dry	1	10/29/2013 16:29	93103
Iron	NELAP	1	2	X	22200	mg/Kg-dry	1	10/29/2013 16:29	93103
Lead	NELAP	2	4		12.8	mg/Kg-dry	1	10/29/2013 16:29	93103
Magnesium	NELAP	0.5	1		4520	mg/Kg-dry	1	10/29/2013 16:29	93103
Manganese	NELAP	0.25	0.5		166	mg/Kg-dry	1	10/29/2013 16:29	93103
Nickel	NELAP	0.5	1		17.6	mg/Kg-dry	1	10/29/2013 16:29	93103
Potassium	NELAP	5	10		1450	mg/Kg-dry	1	10/29/2013 16:29	93103
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	10/29/2013 16:29	93103
Sodium	NELAP	2.5	5		58.6	mg/Kg-dry	1	10/29/2013 16:29	93103
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	10/29/2013 16:29	93103
Vanadium	NELAP	0.5	1		43.8	mg/Kg-dry	1	10/29/2013 16:29	93103
Zinc	NELAP	0.5	1		61.5	mg/Kg-dry	1	10/29/2013 16:29	93103



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-015

Client Sample ID: 2396-3-B19

Matrix: SOLID

Collection Date: 10/23/2013 15:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.35	0.6		< 0.6	mg/Kg-dry	1	10/31/2013 16:56	93104
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.057	mg/Kg-dry	1	10/28/2013 10:53	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.166	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
1,2-Dichlorobenzene	NELAP	0.199	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
1,3-Dichlorobenzene	NELAP	0.21	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
1,4-Dichlorobenzene	NELAP	0.199	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
2,4,5-Trichlorophenol	NELAP	0.119	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
2,4,6-Trichlorophenol	NELAP	0.158	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
2,4-Dichlorophenol	NELAP	0.151	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
2,4-Dimethylphenol	NELAP	0.159	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
2,4-Dinitrophenol	NELAP	0.134	1.25		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
2,4-Dinitrotoluene	NELAP	0.13	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
2,6-Dinitrotoluene	NELAP	0.135	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
2-Chloronaphthalene	NELAP	0.15	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
2-Chlorophenol	NELAP	0.159	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
2-Methylnaphthalene	NELAP	0.149	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
2-Nitroaniline	NELAP	0.114	1.25		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
2-Nitrophenol	NELAP	0.14	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
3,3'-Dichlorobenzidine	NELAP	0.25	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
3-Nitroaniline	NELAP	0.103	1.25		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
4,6-Dinitro-2-methylphenol	NELAP	0.135	1.25		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
4-Bromophenyl phenyl ether	NELAP	0.115	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
4-Chloro-3-methylphenol	NELAP	0.138	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
4-Chloroaniline	NELAP	0.151	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
4-Chlorophenyl phenyl ether	NELAP	0.124	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
4-Nitroaniline	NELAP	0.114	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
4-Nitrophenol	NELAP	0.123	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Acenaphthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Acenaphthylene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Anthracene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Benzo(a)anthracene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Benzo(a)pyrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Benzo(b)fluoranthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Benzo(g,h,i)perylene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Benzo(k)fluoranthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Bis(2-chloroethoxy)methane	NELAP	0.146	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Bis(2-chloroethyl)ether	NELAP	0.178	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Bis(2-chloroisopropyl)ether	NELAP	0.143	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.146	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Butyl benzyl phthalate	NELAP	0.126	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Carbazole		0.153	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Chrysene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Dibenzo(a,h)anthracene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Dibenzofuran	NELAP	0.158	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Diethyl phthalate	NELAP	0.12	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-015

Client Sample ID: 2396-3-B19

Matrix: SOLID

Collection Date: 10/23/2013 15:00

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	0.114	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Di-n-butyl phthalate	NELAP	0.129	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Di-n-octyl phthalate	NELAP	0.13	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Fluoranthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Fluorene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Hexachlorobenzene	NELAP	0.123	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Hexachlorobutadiene	NELAP	0.194	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Hexachlorocyclopentadiene	NELAP	0.128	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Hexachloroethane	NELAP	0.209	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Isophorone	NELAP	0.148	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
m,p-Cresol	NELAP	0.158	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Naphthalene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Nitrobenzene	NELAP	0.156	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
N-Nitroso-di-n-propylamine	NELAP	0.138	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
N-Nitrosodiphenylamine	NELAP	0.115	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
o-Cresol	NELAP	0.148	0.626		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Pentachlorophenol	NELAP	0.826	2.5		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Phenanthrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Phenol	NELAP	0.145	0.438		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Pyrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/03/2013 18:04	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		66.7	%REC	1	11/03/2013 18:04	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		60.4	%REC	1	11/03/2013 18:04	93100
Surr: 2-Fluorophenol		0	30.5-99		59.3	%REC	1	11/03/2013 18:04	93100
Surr: Nitrobenzene-d5		0	34.1-101		56.6	%REC	1	11/03/2013 18:04	93100
Surr: Phenol-d5		0	34.9-110		66.3	%REC	1	11/03/2013 18:04	93100
Surr: p-Terphenyl-d14		0	41.7-124		71.7	%REC	1	11/03/2013 18:04	93100

4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
1,1,1,2-Tetrachloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
1,1,2-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
1,1-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
1,1-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
1,2-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
1,2-Dichloropropane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
1,3-Dichloropropene, Total		0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
2-Butanone	NELAP	0.0092	0.046		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
2-Hexanone	NELAP	0.0092	0.046		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
4-Methyl-2-pentanone	NELAP	0.0092	0.046		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Acetone	NELAP	0.0092	0.046		0.054	mg/Kg-dry	1	10/28/2013 16:53	93156
Benzene	NELAP	0.0005	0.001		0.002	mg/Kg-dry	1	10/28/2013 16:53	93156
Bromodichloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Bromoform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Bromomethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Carbon disulfide	NELAP	0.0028	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Carbon tetrachloride	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156



Laboratory Results

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Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-015

Client Sample ID: 2396-3-B19

Matrix: SOLID

Collection Date: 10/23/2013 15:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chlorobenzene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Chloroethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Chloroform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Chloromethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
cis-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
cis-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Dibromochloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Ethylbenzene	NELAP	0.0009	0.005	J	0.002	mg/Kg-dry	1	10/28/2013 16:53	93156
m,p-Xylenes	NELAP	0.0009	0.005	J	0.003	mg/Kg-dry	1	10/28/2013 16:53	93156
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Methylene chloride	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
o-Xylene	NELAP	0.0009	0.005	J	0.001	mg/Kg-dry	1	10/28/2013 16:53	93156
Styrene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Tetrachloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Toluene	NELAP	0.0009	0.005		0.005	mg/Kg-dry	1	10/28/2013 16:53	93156
trans-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
trans-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Trichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Vinyl acetate	NELAP	0.0184	0.046		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 16:53	93156
Xylenes, Total	NELAP	0.0009	0.005	J	0.004	mg/Kg-dry	1	10/28/2013 16:53	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		86.8	%REC	1	10/28/2013 16:53	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		104.1	%REC	1	10/28/2013 16:53	93156
Surr: Dibromofluoromethane		0	77.7-120		94.6	%REC	1	10/28/2013 16:53	93156
Surr: Toluene-d8		0	86-116		102.9	%REC	1	10/28/2013 16:53	93156



Laboratory Results

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Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-016

Client Sample ID: 2396-3-B18

Matrix: SOLID

Collection Date: 10/23/2013 15:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		9.6	%	1	10/25/2013 15:37	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		90.4	%	1	10/25/2013 15:37	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.74		1	10/25/2013 19:42	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	11/01/2013 11:24	93273
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0965	mg/L	1	10/29/2013 16:57	93144
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 16:57	93144
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 16:57	93144
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 16:57	93144
Chromium	NELAP	0.004	0.01	J	0.0081	mg/L	1	10/29/2013 16:57	93144
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 16:57	93144
Iron	NELAP	0.007	0.02	X	6.89	mg/L	1	10/29/2013 16:57	93144
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 16:57	93144
Manganese	NELAP	0.0016	0.005		0.0384	mg/L	1	10/29/2013 16:57	93144
Nickel	NELAP	0.0033	0.01	J	0.0058	mg/L	1	10/29/2013 16:57	93144
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 16:57	93144
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 16:57	93144
Zinc	NELAP	0.0021	0.01		0.0187	mg/L	1	10/29/2013 16:57	93144
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	10/30/2013 13:43	93146
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 17:21	93146
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 15:01	93154
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	10/29/2013 21:26	93105
Arsenic	NELAP	1.25	2.5		4.21	mg/Kg-dry	1	10/29/2013 16:53	93103
Barium	NELAP	0.25	0.5		40	mg/Kg-dry	1	10/29/2013 16:53	93103
Beryllium	NELAP	0.05	0.1		0.4	mg/Kg-dry	1	10/29/2013 16:53	93103
Boron	NELAP	1	2		9.71	mg/Kg-dry	1	10/29/2013 16:53	93103
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	10/29/2013 16:53	93103
Calcium	NELAP	2.5	5		95500	mg/Kg-dry	1	10/29/2013 16:53	93103
Chromium	NELAP	0.5	1		12.6	mg/Kg-dry	1	10/29/2013 16:53	93103
Cobalt	NELAP	0.5	1		5.31	mg/Kg-dry	1	10/29/2013 16:53	93103
Copper	NELAP	0.5	1		11.9	mg/Kg-dry	1	10/29/2013 16:53	93103
Iron	NELAP	1	2		12900	mg/Kg-dry	1	10/29/2013 16:53	93103
Lead	NELAP	2	4		5.42	mg/Kg-dry	1	10/29/2013 16:53	93103
Magnesium	NELAP	0.5	1		40300	mg/Kg-dry	1	10/29/2013 16:53	93103
Manganese	NELAP	0.25	0.5		416	mg/Kg-dry	1	10/29/2013 16:53	93103
Nickel	NELAP	0.5	1		13.9	mg/Kg-dry	1	10/29/2013 16:53	93103
Potassium	NELAP	5	10		2280	mg/Kg-dry	1	10/29/2013 16:53	93103
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	10/29/2013 16:53	93103
Sodium	NELAP	2.5	5		134	mg/Kg-dry	1	10/29/2013 16:53	93103
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	10/29/2013 16:53	93103

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-016

Client Sample ID: 2396-3-B18

Matrix: SOLID

Collection Date: 10/23/2013 15:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.5	1		17.5	mg/Kg-dry	1	10/29/2013 16:53	93103
Zinc	NELAP	0.5	1		25.4	mg/Kg-dry	1	10/29/2013 16:53	93103
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.324	0.556		< 0.556	mg/Kg-dry	1	10/31/2013 16:59	93104
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.011	mg/Kg-dry	1	10/28/2013 10:55	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.145	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
1,2-Dichlorobenzene	NELAP	0.173	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
1,3-Dichlorobenzene	NELAP	0.183	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
1,4-Dichlorobenzene	NELAP	0.173	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
2,4,5-Trichlorophenol	NELAP	0.103	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
2,4,6-Trichlorophenol	NELAP	0.137	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
2,4-Dichlorophenol	NELAP	0.132	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
2,4-Dimethylphenol	NELAP	0.138	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
2,4-Dinitrophenol	NELAP	0.116	1.09		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
2,4-Dinitrotoluene	NELAP	0.113	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
2,6-Dinitrotoluene	NELAP	0.118	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
2-Chloronaphthalene	NELAP	0.131	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
2-Chlorophenol	NELAP	0.138	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
2-Methylnaphthalene	NELAP	0.13	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
2-Nitroaniline	NELAP	0.099	1.09		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
2-Nitrophenol	NELAP	0.122	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
3,3'-Dichlorobenzidine	NELAP	0.218	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
3-Nitroaniline	NELAP	0.089	1.09		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
4,6-Dinitro-2-methylphenol	NELAP	0.118	1.09		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
4-Bromophenyl phenyl ether	NELAP	0.1	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
4-Chloro-3-methylphenol	NELAP	0.12	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
4-Chloroaniline	NELAP	0.132	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
4-Chlorophenyl phenyl ether	NELAP	0.108	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
4-Nitroaniline	NELAP	0.099	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
4-Nitrophenol	NELAP	0.107	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Acenaphthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Acenaphthylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Benzo(a)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Benzo(a)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Benzo(b)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Benzo(g,h,i)perylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Benzo(k)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Bis(2-chloroethoxy)methane	NELAP	0.127	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Bis(2-chloroethyl)ether	NELAP	0.155	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Bis(2-chloroisopropyl)ether	NELAP	0.124	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.127	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Butyl benzyl phthalate	NELAP	0.11	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Carbazole		0.133	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Chrysene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-016

Client Sample ID: 2396-3-B18

Matrix: SOLID

Collection Date: 10/23/2013 15:15

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	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Dibenzofuran	NELAP	0.137	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Diethyl phthalate	NELAP	0.104	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Dimethyl phthalate	NELAP	0.099	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Di-n-butyl phthalate	NELAP	0.112	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Di-n-octyl phthalate	NELAP	0.113	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Fluorene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Hexachlorobenzene	NELAP	0.107	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Hexachlorobutadiene	NELAP	0.169	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Hexachlorocyclopentadiene	NELAP	0.111	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Hexachloroethane	NELAP	0.182	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Isophorone	NELAP	0.128	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
m,p-Cresol	NELAP	0.137	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Naphthalene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Nitrobenzene	NELAP	0.136	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
N-Nitroso-di-n-propylamine	NELAP	0.12	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
N-Nitrosodiphenylamine	NELAP	0.1	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
o-Cresol	NELAP	0.128	0.544		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Pentachlorophenol	NELAP	0.718	2.18		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Phenanthrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Phenol	NELAP	0.126	0.381		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 18:38	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		67.9	%REC	1	11/03/2013 18:38	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		59.7	%REC	1	11/03/2013 18:38	93100
Surr: 2-Fluorophenol		0	30.5-99		59.6	%REC	1	11/03/2013 18:38	93100
Surr: Nitrobenzene-d5		0	34.1-101		56.8	%REC	1	11/03/2013 18:38	93100
Surr: Phenol-d5		0	34.9-110		67.9	%REC	1	11/03/2013 18:38	93100
Surr: p-Terphenyl-d14		0	41.7-124		71.9	%REC	1	11/03/2013 18:38	93100

4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
1,1,1,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
2-Butanone	NELAP	0.0076	0.038		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
2-Hexanone	NELAP	0.0076	0.038		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
4-Methyl-2-pentanone	NELAP	0.0076	0.038		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Acetone	NELAP	0.0076	0.038	J	0.016	mg/Kg-dry	1	10/28/2013 17:19	93156
Benzene	NELAP	0.0004	0.001		0.002	mg/Kg-dry	1	10/28/2013 17:19	93156
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-016

Client Sample ID: 2396-3-B18

Matrix: SOLID

Collection Date: 10/23/2013 15:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Carbon disulfide	NELAP	0.0023	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Chloroethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Chloromethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Ethylbenzene	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	10/28/2013 17:19	93156
m,p-Xylenes	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	10/28/2013 17:19	93156
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
o-Xylene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 17:19	93156
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Toluene	NELAP	0.0008	0.004		0.004	mg/Kg-dry	1	10/28/2013 17:19	93156
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Vinyl acetate	NELAP	0.0153	0.038		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/28/2013 17:19	93156
Xylenes, Total	NELAP	0.0008	0.004	J	0.003	mg/Kg-dry	1	10/28/2013 17:19	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		89.8	%REC	1	10/28/2013 17:19	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		95.2	%REC	1	10/28/2013 17:19	93156
Surr: Dibromofluoromethane		0	77.7-120		93.3	%REC	1	10/28/2013 17:19	93156
Surr: Toluene-d8		0	86-116		99	%REC	1	10/28/2013 17:19	93156



Laboratory Results

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Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-017

Client Sample ID: 2396-3-B18 DUP

Matrix: SOLID

Collection Date: 10/23/2013 15:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		9.1	%	1	10/25/2013 15:37	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		90.9	%	1	10/25/2013 15:37	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.87		1	10/25/2013 19:44	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	11/01/2013 12:25	93269
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.074	mg/L	1	10/29/2013 17:01	93144
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 17:01	93144
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 17:01	93144
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 17:01	93144
Chromium	NELAP	0.004	0.01	J	0.0088	mg/L	1	10/29/2013 17:01	93144
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 17:01	93144
Iron	NELAP	0.007	0.02	SX	6.7	mg/L	1	10/29/2013 17:01	93144
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 17:01	93144
Manganese	NELAP	0.0016	0.005		0.04	mg/L	1	10/29/2013 17:01	93144
Nickel	NELAP	0.0033	0.01	J	0.0062	mg/L	1	10/29/2013 17:01	93144
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 17:01	93144
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 17:01	93144
Zinc	NELAP	0.0021	0.01		0.0222	mg/L	1	10/29/2013 17:01	93144
<i>MS QC limits for Fe are not applicable due to high sample/spike ratio.</i>									
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	10/30/2013 13:47	93146
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 17:25	93146
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 15:08	93154
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.55	4.9		< 4.9	mg/Kg-dry	1	10/29/2013 21:29	93105
Arsenic	NELAP	1.2	2.4		4.26	mg/Kg-dry	1	10/29/2013 16:59	93103
Barium	NELAP	0.24	0.48		41.3	mg/Kg-dry	1	10/29/2013 16:59	93103
Beryllium	NELAP	0.05	0.1		0.41	mg/Kg-dry	1	10/29/2013 16:59	93103
Boron	NELAP	0.96	1.92		9.83	mg/Kg-dry	1	10/29/2013 16:59	93103
Cadmium	NELAP	0.1	0.19		< 0.19	mg/Kg-dry	1	10/29/2013 16:59	93103
Calcium	NELAP	2.4	4.81	S	86400	mg/Kg-dry	1	10/29/2013 16:59	93103
Chromium	NELAP	0.48	0.96	X	13.4	mg/Kg-dry	1	10/29/2013 16:59	93103
Cobalt	NELAP	0.48	0.96		5.89	mg/Kg-dry	1	10/29/2013 16:59	93103
Copper	NELAP	0.48	0.96		15.1	mg/Kg-dry	1	10/29/2013 16:59	93103
Iron	NELAP	0.96	1.92	S	13900	mg/Kg-dry	1	10/29/2013 16:59	93103
Lead	NELAP	1.92	3.85		6.51	mg/Kg-dry	1	10/29/2013 16:59	93103
Magnesium	NELAP	0.48	0.96	S	36000	mg/Kg-dry	1	10/29/2013 16:59	93103
Manganese	NELAP	0.24	0.48		356	mg/Kg-dry	1	10/29/2013 16:59	93103
Nickel	NELAP	0.48	0.96		15	mg/Kg-dry	1	10/29/2013 16:59	93103
Potassium	NELAP	4.81	9.62	S	2560	mg/Kg-dry	1	10/29/2013 16:59	93103
Silver	NELAP	0.48	0.53		< 0.53	mg/Kg-dry	1	10/29/2013 16:59	93103
Sodium	NELAP	2.4	4.81		137	mg/Kg-dry	1	10/29/2013 16:59	93103
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	10/29/2013 16:59	93103

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-017

Client Sample ID: 2396-3-B18 DUP

Matrix: SOLID

Collection Date: 10/23/2013 15:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.48	0.96		19.3	mg/Kg-dry	1	10/29/2013 16:59	93103
Zinc	NELAP	0.48	0.96		30.3	mg/Kg-dry	1	10/29/2013 16:59	93103
<i>MS QC limits for Ca, Fe, Mg, and K are not applicable due to high sample/spike ratio.</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.35	0.6	S	< 0.6	mg/Kg-dry	1	11/01/2013 9:10	93104
<i>Se - Matrix interference present in sample. Confirmed by bench spike.</i>									
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.012	mg/Kg-dry	1	10/28/2013 11:06	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.146	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
1,2-Dichlorobenzene	NELAP	0.174	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
1,3-Dichlorobenzene	NELAP	0.184	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
1,4-Dichlorobenzene	NELAP	0.174	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
2,4,5-Trichlorophenol	NELAP	0.104	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
2,4,6-Trichlorophenol	NELAP	0.138	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
2,4-Dichlorophenol	NELAP	0.133	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
2,4-Dimethylphenol	NELAP	0.139	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
2,4-Dinitrophenol	NELAP	0.117	1.1		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
2,4-Dinitrotoluene	NELAP	0.114	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
2,6-Dinitrotoluene	NELAP	0.118	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
2-Chloronaphthalene	NELAP	0.132	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
2-Chlorophenol	NELAP	0.139	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
2-Methylnaphthalene	NELAP	0.13	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
2-Nitroaniline	NELAP	0.1	1.1		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
2-Nitrophenol	NELAP	0.123	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
3,3'-Dichlorobenzidine	NELAP	0.219	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
3-Nitroaniline	NELAP	0.09	1.1		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
4,6-Dinitro-2-methylphenol	NELAP	0.118	1.1		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
4-Bromophenyl phenyl ether	NELAP	0.101	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
4-Chloro-3-methylphenol	NELAP	0.121	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
4-Chloroaniline	NELAP	0.133	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
4-Chlorophenyl phenyl ether	NELAP	0.109	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
4-Nitroaniline	NELAP	0.1	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
4-Nitrophenol	NELAP	0.107	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Acenaphthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Acenaphthylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Benzo(a)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Benzo(a)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Benzo(b)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Benzo(g,h,i)perylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Benzo(k)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Bis(2-chloroethoxy)methane	NELAP	0.128	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Bis(2-chloroethyl)ether	NELAP	0.156	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Bis(2-chloroisopropyl)ether	NELAP	0.125	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.128	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Butyl benzyl phthalate	NELAP	0.111	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-017

Client Sample ID: 2396-3-B18 DUP

Matrix: SOLID

Collection Date: 10/23/2013 15:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbazole		0.134	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Chrysene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Dibenzo(a,h)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Dibenzofuran	NELAP	0.138	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Diethyl phthalate	NELAP	0.105	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Dimethyl phthalate	NELAP	0.1	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Di-n-butyl phthalate	NELAP	0.113	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Di-n-octyl phthalate	NELAP	0.114	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Fluorene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Hexachlorobenzene	NELAP	0.107	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Hexachlorobutadiene	NELAP	0.17	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Hexachlorocyclopentadiene	NELAP	0.112	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Hexachloroethane	NELAP	0.183	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Isophorone	NELAP	0.129	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
m,p-Cresol	NELAP	0.138	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Naphthalene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Nitrobenzene	NELAP	0.137	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
N-Nitroso-di-n-propylamine	NELAP	0.121	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
N-Nitrosodiphenylamine	NELAP	0.101	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
o-Cresol	NELAP	0.129	0.548		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Pentachlorophenol	NELAP	0.723	2.19		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Phenanthrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Phenol	NELAP	0.127	0.384		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/03/2013 20:19	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		60.6	%REC	1	11/03/2013 20:19	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		60.3	%REC	1	11/03/2013 20:19	93100
Surr: 2-Fluorophenol		0	30.5-99		54.3	%REC	1	11/03/2013 20:19	93100
Surr: Nitrobenzene-d5		0	34.1-101		55.3	%REC	1	11/03/2013 20:19	93100
Surr: Phenol-d5		0	34.9-110		61.8	%REC	1	11/03/2013 20:19	93100
Surr: p-Terphenyl-d14		0	41.7-124		71.8	%REC	1	11/03/2013 20:19	93100
<i>4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.</i>									
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
1,1,1,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
2-Butanone	NELAP	0.0071	0.036		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
2-Hexanone	NELAP	0.0071	0.036		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
4-Methyl-2-pentanone	NELAP	0.0071	0.036		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Acetone	NELAP	0.0071	0.036	J	0.01	mg/Kg-dry	1	10/28/2013 17:45	93156
Benzene	NELAP	0.0004	0.001		0.002	mg/Kg-dry	1	10/28/2013 17:45	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-017

Client Sample ID: 2396-3-B18 DUP

Matrix: SOLID

Collection Date: 10/23/2013 15:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Bromomethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Carbon disulfide	NELAP	0.0021	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Chlorobenzene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Chloroethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Chloromethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Ethylbenzene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 17:45	93156
m,p-Xylenes	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	10/28/2013 17:45	93156
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Methylene chloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
o-Xylene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 17:45	93156
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Toluene	NELAP	0.0007	0.004		0.004	mg/Kg-dry	1	10/28/2013 17:45	93156
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Vinyl acetate	NELAP	0.0142	0.036		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/28/2013 17:45	93156
Xylenes, Total	NELAP	0.0007	0.004	J	0.003	mg/Kg-dry	1	10/28/2013 17:45	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		89.2	%REC	1	10/28/2013 17:45	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		94.1	%REC	1	10/28/2013 17:45	93156
Surr: Dibromofluoromethane		0	77.7-120		93.7	%REC	1	10/28/2013 17:45	93156
Surr: Toluene-d8		0	86-116		100	%REC	1	10/28/2013 17:45	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-018

Client Sample ID: 2396-3-B20

Matrix: SOLID

Collection Date: 10/23/2013 15:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		11.5	%	1	10/25/2013 15:38	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		88.5	%	1	10/25/2013 15:38	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.88		1	10/25/2013 19:47	R183256
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0505	mg/L	1	10/29/2013 17:12	93144
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 17:12	93144
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 17:12	93144
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 17:12	93144
Chromium	NELAP	0.004	0.01	J	0.0059	mg/L	1	10/29/2013 17:12	93144
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 17:12	93144
Iron	NELAP	0.007	0.02		4.21	mg/L	1	10/29/2013 17:12	93144
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 17:12	93144
Manganese	NELAP	0.0016	0.005		0.025	mg/L	1	10/29/2013 17:12	93144
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	10/29/2013 17:12	93144
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 17:12	93144
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 17:12	93144
Zinc	NELAP	0.0021	0.01		0.0153	mg/L	1	10/29/2013 17:12	93144
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	10/30/2013 13:51	93146
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 17:28	93146
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 15:15	93154
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	10/29/2013 21:40	93105
Arsenic	NELAP	1.25	2.5		4.21	mg/Kg-dry	1	10/29/2013 17:17	93103
Barium	NELAP	0.25	0.5		34.6	mg/Kg-dry	1	10/29/2013 17:17	93103
Beryllium	NELAP	0.05	0.1		0.31	mg/Kg-dry	1	10/29/2013 17:17	93103
Boron	NELAP	1	2		7.69	mg/Kg-dry	1	10/29/2013 17:17	93103
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	10/29/2013 17:17	93103
Calcium	NELAP	2.5	5		73300	mg/Kg-dry	1	10/29/2013 17:17	93103
Chromium	NELAP	0.5	1		10.3	mg/Kg-dry	1	10/29/2013 17:17	93103
Cobalt	NELAP	0.5	1		3.88	mg/Kg-dry	1	10/29/2013 17:17	93103
Copper	NELAP	0.5	1		8.69	mg/Kg-dry	1	10/29/2013 17:17	93103
Iron	NELAP	1	2		10500	mg/Kg-dry	1	10/29/2013 17:17	93103
Lead	NELAP	2	4		4.24	mg/Kg-dry	1	10/29/2013 17:17	93103
Magnesium	NELAP	0.5	1		29600	mg/Kg-dry	1	10/29/2013 17:17	93103
Manganese	NELAP	0.25	0.5		208	mg/Kg-dry	1	10/29/2013 17:17	93103
Nickel	NELAP	0.5	1		10	mg/Kg-dry	1	10/29/2013 17:17	93103
Potassium	NELAP	5	10		1590	mg/Kg-dry	1	10/29/2013 17:17	93103
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	10/29/2013 17:17	93103
Sodium	NELAP	2.5	5		102	mg/Kg-dry	1	10/29/2013 17:17	93103
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	10/29/2013 17:17	93103
Vanadium	NELAP	0.5	1		15.3	mg/Kg-dry	1	10/29/2013 17:17	93103
Zinc	NELAP	0.5	1		23.6	mg/Kg-dry	1	10/29/2013 17:17	93103



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-018

Client Sample ID: 2396-3-B20

Matrix: SOLID

Collection Date: 10/23/2013 15:30

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	10/31/2013 17:16	93104
SW-846 7471B									
Mercury	NELAP	0.003	0.011	J	0.009	mg/Kg-dry	1	10/28/2013 11:09	93082
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.148	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
1,2-Dichlorobenzene	NELAP	0.177	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
1,3-Dichlorobenzene	NELAP	0.187	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
1,4-Dichlorobenzene	NELAP	0.177	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
2,4,5-Trichlorophenol	NELAP	0.106	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
2,4,6-Trichlorophenol	NELAP	0.14	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
2,4-Dichlorophenol	NELAP	0.135	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
2,4-Dimethylphenol	NELAP	0.141	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
2,4-Dinitrophenol	NELAP	0.119	1.11		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
2,4-Dinitrotoluene	NELAP	0.116	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
2,6-Dinitrotoluene	NELAP	0.12	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
2-Chloronaphthalene	NELAP	0.134	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
2-Chlorophenol	NELAP	0.141	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
2-Methylnaphthalene	NELAP	0.132	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
2-Nitroaniline	NELAP	0.101	1.11		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
2-Nitrophenol	NELAP	0.125	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
3,3'-Dichlorobenzidine	NELAP	0.223	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
3-Nitroaniline	NELAP	0.091	1.11		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
4,6-Dinitro-2-methylphenol	NELAP	0.12	1.11		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
4-Bromophenyl phenyl ether	NELAP	0.102	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
4-Chloro-3-methylphenol	NELAP	0.122	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
4-Chloroaniline	NELAP	0.135	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
4-Chlorophenyl phenyl ether	NELAP	0.11	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
4-Nitroaniline	NELAP	0.101	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
4-Nitrophenol	NELAP	0.109	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Acenaphthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Acenaphthylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Benzo(a)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Benzo(a)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Benzo(b)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Benzo(g,h,i)perylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Benzo(k)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Bis(2-chloroethoxy)methane	NELAP	0.13	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Bis(2-chloroethyl)ether	NELAP	0.158	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Bis(2-chloroisopropyl)ether	NELAP	0.127	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Bis(2-ethylhexyl)phthalate	NELAP	0.13	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Butyl benzyl phthalate	NELAP	0.112	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Carbazole		0.136	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Chrysene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Dibenzo(a,h)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Dibenzofuran	NELAP	0.14	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Diethyl phthalate	NELAP	0.107	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-018

Client Sample ID: 2396-3-B20

Matrix: SOLID

Collection Date: 10/23/2013 15:30

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	0.101	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Di-n-butyl phthalate	NELAP	0.115	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Di-n-octyl phthalate	NELAP	0.116	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Fluorene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Hexachlorobenzene	NELAP	0.109	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Hexachlorobutadiene	NELAP	0.173	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Hexachlorocyclopentadiene	NELAP	0.114	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Hexachloroethane	NELAP	0.186	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Isophorone	NELAP	0.131	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
m,p-Cresol	NELAP	0.14	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Naphthalene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Nitrobenzene	NELAP	0.139	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
N-Nitroso-di-n-propylamine	NELAP	0.122	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
N-Nitrosodiphenylamine	NELAP	0.102	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
o-Cresol	NELAP	0.131	0.557		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Pentachlorophenol	NELAP	0.735	2.23		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Phenanthrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Phenol	NELAP	0.129	0.39		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/03/2013 20:53	93100
Surr: 2,4,6-Tribromophenol		0	32.7-130		66.5	%REC	1	11/03/2013 20:53	93100
Surr: 2-Fluorobiphenyl		0	34.1-116		63.9	%REC	1	11/03/2013 20:53	93100
Surr: 2-Fluorophenol		0	30.5-99		61.1	%REC	1	11/03/2013 20:53	93100
Surr: Nitrobenzene-d5		0	34.1-101		58.7	%REC	1	11/03/2013 20:53	93100
Surr: Phenol-d5		0	34.9-110		69	%REC	1	11/03/2013 20:53	93100
Surr: p-Terphenyl-d14		0	41.7-124		72.6	%REC	1	11/03/2013 20:53	93100

4-Nitrophenol was outside the upper QC limits in the LCS. Sample results were below the reporting limit. Data is reportable.

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
1,1,1,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
2-Butanone	NELAP	0.0075	0.037		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
2-Hexanone	NELAP	0.0075	0.037		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
4-Methyl-2-pentanone	NELAP	0.0075	0.037		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Acetone	NELAP	0.0075	0.037	J	0.018	mg/Kg-dry	1	10/28/2013 18:12	93156
Benzene	NELAP	0.0004	0.001		0.002	mg/Kg-dry	1	10/28/2013 18:12	93156
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Bromomethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Carbon disulfide	NELAP	0.0022	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101297

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101297-018

Client Sample ID: 2396-3-B20

Matrix: SOLID

Collection Date: 10/23/2013 15:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chlorobenzene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Chloroethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Chloromethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Ethylbenzene	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	10/28/2013 18:12	93156
m,p-Xylenes	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	10/28/2013 18:12	93156
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Methylene chloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
o-Xylene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 18:12	93156
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Toluene	NELAP	0.0007	0.004		0.005	mg/Kg-dry	1	10/28/2013 18:12	93156
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Vinyl acetate	NELAP	0.0149	0.037		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/28/2013 18:12	93156
Xylenes, Total	NELAP	0.0007	0.004	J	0.003	mg/Kg-dry	1	10/28/2013 18:12	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		89.6	%REC	1	10/28/2013 18:12	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		93.6	%REC	1	10/28/2013 18:12	93156
Surr: Dibromofluoromethane		0	77.7-120		94.6	%REC	1	10/28/2013 18:12	93156
Surr: Toluene-d8		0	86-116		99	%REC	1	10/28/2013 18:12	93156



CHAIN OF CUSTODY RECORD

Client Contact Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	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: <u>US Rt 20 Kene Co</u> Project No.: <u>1067 2013-033</u> TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>SFR/CM</u>	COC No.: <u>3</u> of <u>3</u> Lab Job No.: <u>13101997</u> 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 L: Leachate DW: Drinking Water OL: Oil O: Other														
ANALYSES																
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BTEX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids	Waste Characterization	Comments
13101997-015	2396-3-B19	10/23	3:00	Soil	X	X					X	X	X	X		0-7
016	2396-3-B18		3:15													0-7
017	2396-3-B18 DUF		3:15													0-7
018	2396-3-B20		3:30													0-7
019	2396-3-B34		10:20													0-7
Relinquished by: Date/Time: <u>10/23/17 3:16</u> Received by: Date/Time: <u>10/23/17 3:16</u>																
Relinquished by: Date/Time: <u>10/24/13 09:30</u> Received by: <u>Stephane Haynes</u> Date/Time: <u>10/23/13 9:10</u>																
Relinquished by: _____ Date/Time: _____ Received by: _____ Date/Time: _____																

December 09, 2013

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



RE: IDOT2013-033

WorkOrder: 13111397

Dear Colleen Grey:

TEKLAB, INC received 6 samples on 11/27/2013 1:00:00 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
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13111397

Client Project: IDOT2013-033

Report Date: 09-Dec-13

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Report Contents	2
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Laboratory Results	5
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Receiving Check List	51
Chain of Custody	Appended

Client: Andrews Engineering, Inc.

Work Order: 13111397

Client Project: IDOT2013-033

Report Date: 09-Dec-13

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: 13111397

Client Project: IDOT2013-033

Report Date: 09-Dec-13

Cooler Receipt Temp: 1.4 °C

Locations and Accreditations

	<u>Collinsville</u>	<u>Springfield</u>	<u>Kansas City</u>	<u>Collinsville Air</u>
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	3920 Pintail Dr Springfield, IL 62711-9415	8421 Nieman Road Lenexa, KS 66214	5445 Horseshoe Lake Road 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

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



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13111397

Client Project: IDOT2013-033

Report Date: 09-Dec-13

Lab ID: 13111397-001

Client Sample ID: 2396-3-B33

Matrix: SOLID

Collection Date: 11/25/2013 14:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		9.1	%	1	11/27/2013 15:00	R184629
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		90.9	%	1	11/27/2013 15:00	R184629
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.11		1	12/02/2013 20:18	R184642
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.07	0.2		< 0.2	mg/L	1	12/09/2013 12:40	94396
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0932	mg/L	1	12/04/2013 16:15	94262
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	12/04/2013 16:15	94262
Boron	NELAP	1	2		< 2	mg/L	1	12/04/2013 16:15	94262
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	12/04/2013 16:15	94262
Chromium	NELAP	0.004	0.01		0.0109	mg/L	1	12/04/2013 16:15	94262
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	12/04/2013 16:15	94262
Iron	NELAP	0.007	0.02	X	8.46	mg/L	1	12/04/2013 16:15	94262
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	12/04/2013 16:15	94262
Manganese	NELAP	0.0016	0.005		0.0619	mg/L	1	12/04/2013 16:15	94262
Nickel	NELAP	0.0033	0.01	J	0.0081	mg/L	1	12/04/2013 16:15	94262
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	12/04/2013 16:15	94262
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	12/04/2013 16:15	94262
Zinc	NELAP	0.0021	0.01		0.0218	mg/L	1	12/04/2013 16:15	94262
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	12/04/2013 11:04	94264
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	12/04/2013 15:44	94264
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	12/04/2013 13:24	94266
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.45	4.72		< 4.72	mg/Kg-dry	1	12/03/2013 21:05	94238
Arsenic	NELAP	1.23	2.45		4.64	mg/Kg-dry	1	12/03/2013 23:02	94227
Barium	NELAP	0.25	0.49		52.7	mg/Kg-dry	1	12/03/2013 23:02	94227
Beryllium	NELAP	0.05	0.1		0.48	mg/Kg-dry	1	12/03/2013 23:02	94227
Boron	NELAP	0.98	1.96		12	mg/Kg-dry	1	12/04/2013 18:14	94227
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	12/03/2013 23:02	94227
Calcium	NELAP	2.45	4.9		88300	mg/Kg-dry	1	12/03/2013 23:02	94227
Chromium	NELAP	0.49	0.98	X	15.5	mg/Kg-dry	1	12/03/2013 23:02	94227
Cobalt	NELAP	0.49	0.98		6.02	mg/Kg-dry	1	12/03/2013 23:02	94227
Copper	NELAP	0.49	0.98		14.9	mg/Kg-dry	1	12/03/2013 23:02	94227
Iron	NELAP	0.98	1.96	X	15700	mg/Kg-dry	1	12/03/2013 23:02	94227
Lead	NELAP	1.96	3.92		5.7	mg/Kg-dry	1	12/03/2013 23:02	94227
Magnesium	NELAP	0.49	0.98		40300	mg/Kg-dry	1	12/03/2013 23:02	94227
Manganese	NELAP	0.25	0.49		344	mg/Kg-dry	1	12/03/2013 23:02	94227
Nickel	NELAP	0.49	0.98		17	mg/Kg-dry	1	12/03/2013 23:02	94227
Potassium	NELAP	4.9	9.8		2640	mg/Kg-dry	1	12/03/2013 23:02	94227
Silver	NELAP	0.49	0.54		< 0.54	mg/Kg-dry	1	12/03/2013 23:02	94227
Sodium	NELAP	2.45	4.9		139	mg/Kg-dry	1	12/03/2013 23:02	94227
Thallium	NELAP	2.45	2.55		< 2.55	mg/Kg-dry	1	12/03/2013 23:02	94227

Client: Andrews Engineering, Inc.

Work Order: 13111397

Client Project: IDOT2013-033

Report Date: 09-Dec-13

Lab ID: 13111397-001

Client Sample ID: 2396-3-B33

Matrix: SOLID

Collection Date: 11/25/2013 14:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.49	0.98		21.2	mg/Kg-dry	1	12/03/2013 23:02	94227
Zinc	NELAP	0.49	0.98		29.4	mg/Kg-dry	1	12/03/2013 23:02	94227
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.318	0.545		< 0.545	mg/Kg-dry	1	12/03/2013 14:09	94237
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.012	mg/Kg-dry	1	12/03/2013 15:03	94241
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.145	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
1,2-Dichlorobenzene	NELAP	0.173	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
1,3-Dichlorobenzene	NELAP	0.183	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
1,4-Dichlorobenzene	NELAP	0.173	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
2,4,5-Trichlorophenol	NELAP	0.103	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
2,4,6-Trichlorophenol	NELAP	0.137	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
2,4-Dichlorophenol	NELAP	0.132	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
2,4-Dimethylphenol	NELAP	0.138	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
2,4-Dinitrophenol	NELAP	0.117	1.09		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
2,4-Dinitrotoluene	NELAP	0.113	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
2,6-Dinitrotoluene	NELAP	0.118	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
2-Chloronaphthalene	NELAP	0.131	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
2-Chlorophenol	NELAP	0.138	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
2-Methylnaphthalene	NELAP	0.13	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
2-Nitroaniline	NELAP	0.099	1.09		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
2-Nitrophenol	NELAP	0.122	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
3,3'-Dichlorobenzidine	NELAP	0.218	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
3-Nitroaniline	NELAP	0.089	1.09		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
4,6-Dinitro-2-methylphenol	NELAP	0.118	1.09		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
4-Bromophenyl phenyl ether	NELAP	0.1	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
4-Chloro-3-methylphenol	NELAP	0.12	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
4-Chloroaniline	NELAP	0.132	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
4-Chlorophenyl phenyl ether	NELAP	0.108	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
4-Nitroaniline	NELAP	0.099	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
4-Nitrophenol	NELAP	0.107	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Acenaphthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Acenaphthylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Benzo(a)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Benzo(a)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Benzo(b)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Benzo(g,h,i)perylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Benzo(k)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Bis(2-chloroethoxy)methane	NELAP	0.127	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Bis(2-chloroethyl)ether	NELAP	0.155	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Bis(2-chloroisopropyl)ether	NELAP	0.124	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Bis(2-ethylhexyl)phthalate	NELAP	0.127	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Butyl benzyl phthalate	NELAP	0.11	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Carbazole		0.133	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Chrysene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208

Client: Andrews Engineering, Inc.

Work Order: 13111397

Client Project: IDOT2013-033

Report Date: 09-Dec-13

Lab ID: 13111397-001

Client Sample ID: 2396-3-B33

Matrix: SOLID

Collection Date: 11/25/2013 14:40

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	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Dibenzofuran	NELAP	0.137	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Diethyl phthalate	NELAP	0.105	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Dimethyl phthalate	NELAP	0.099	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Di-n-butyl phthalate	NELAP	0.112	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Di-n-octyl phthalate	NELAP	0.113	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Fluorene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Hexachlorobenzene	NELAP	0.107	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Hexachlorobutadiene	NELAP	0.169	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Hexachlorocyclopentadiene	NELAP	0.111	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Hexachloroethane	NELAP	0.182	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Isophorone	NELAP	0.128	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
m,p-Cresol	NELAP	0.137	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Naphthalene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Nitrobenzene	NELAP	0.136	0.544	S	ND	mg/Kg-dry	1	12/03/2013 14:33	94208
N-Nitroso-di-n-propylamine	NELAP	0.12	0.544	S	ND	mg/Kg-dry	1	12/03/2013 14:33	94208
N-Nitrosodiphenylamine	NELAP	0.1	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
o-Cresol	NELAP	0.128	0.544		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Pentachlorophenol	NELAP	0.719	2.18		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Phenanthrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Phenol	NELAP	0.126	0.381		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 14:33	94208
Surr: 2,4,6-Tribromophenol		0	32.7-130		59.3	%REC	1	12/03/2013 14:33	94208
Surr: 2-Fluorobiphenyl		0	34.1-116		56.5	%REC	1	12/03/2013 14:33	94208
Surr: 2-Fluorophenol		0	30.5-99		64.7	%REC	1	12/03/2013 14:33	94208
Surr: Nitrobenzene-d5		0	34.1-101		49.3	%REC	1	12/03/2013 14:33	94208
Surr: Phenol-d5		0	34.9-110		70.9	%REC	1	12/03/2013 14:33	94208
Surr: p-Terphenyl-d14		0	41.7-124		71.5	%REC	1	12/03/2013 14:33	94208

MS did not recover within control 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	12/03/2013 12:55	94284
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
2-Butanone	NELAP	0.0082	0.041	J	0.021	mg/Kg-dry	1	12/03/2013 12:55	94284
2-Hexanone	NELAP	0.0082	0.041		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
4-Methyl-2-pentanone	NELAP	0.0082	0.041		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
Acetone	NELAP	0.0082	0.041		0.136	mg/Kg-dry	1	12/03/2013 12:55	94284
Benzene	NELAP	0.0004	0.001		0.002	mg/Kg-dry	1	12/03/2013 12:55	94284
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13111397

Client Project: IDOT2013-033

Report Date: 09-Dec-13

Lab ID: 13111397-001

Client Sample ID: 2396-3-B33

Matrix: SOLID

Collection Date: 11/25/2013 14:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
Carbon disulfide	NELAP	0.0025	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
Chloroethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
Chloromethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
Ethylbenzene	NELAP	0.0008	0.004	J	0.004	mg/Kg-dry	1	12/03/2013 12:55	94284
m,p-Xylenes	NELAP	0.0008	0.004		0.008	mg/Kg-dry	1	12/03/2013 12:55	94284
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
Methylene chloride	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	12/03/2013 12:55	94284
o-Xylene	NELAP	0.0008	0.004	J	0.003	mg/Kg-dry	1	12/03/2013 12:55	94284
Styrene	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	12/03/2013 12:55	94284
Tetrachloroethene	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	12/03/2013 12:55	94284
Toluene	NELAP	0.0008	0.004		0.006	mg/Kg-dry	1	12/03/2013 12:55	94284
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
Vinyl acetate	NELAP	0.0164	0.041		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	12/03/2013 12:55	94284
Xylenes, Total	NELAP	0.0008	0.004		0.011	mg/Kg-dry	1	12/03/2013 12:55	94284
Surr: 1,2-Dichloroethane-d4		0	72.2-131		113.5	%REC	1	12/03/2013 12:55	94284
Surr: 4-Bromofluorobenzene		0	82.1-116		107.4	%REC	1	12/03/2013 12:55	94284
Surr: Dibromofluoromethane		0	77.7-120		106.5	%REC	1	12/03/2013 12:55	94284
Surr: Toluene-d8		0	86-116		100	%REC	1	12/03/2013 12:55	94284



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13111397

Client Project: IDOT2013-033

Report Date: 09-Dec-13

Lab ID: 13111397-002

Client Sample ID: 2396-3-B23

Matrix: SOLID

Collection Date: 11/25/2013 14:50

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	11/27/2013 15:00	R184629
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		90.2	%	1	11/27/2013 15:00	R184629
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.39		1	12/02/2013 20:21	R184642
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0608	mg/L	1	12/04/2013 16:19	94262
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	12/04/2013 16:19	94262
Boron	NELAP	1	2		< 2	mg/L	1	12/04/2013 16:19	94262
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	12/04/2013 16:19	94262
Chromium	NELAP	0.004	0.01	J	0.0046	mg/L	1	12/04/2013 16:19	94262
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	12/04/2013 16:19	94262
Iron	NELAP	0.007	0.02		4.06	mg/L	1	12/04/2013 16:19	94262
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	12/04/2013 16:19	94262
Manganese	NELAP	0.0016	0.005		0.0223	mg/L	1	12/04/2013 16:19	94262
Nickel	NELAP	0.0033	0.01	J	0.0034	mg/L	1	12/04/2013 16:19	94262
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	12/04/2013 16:19	94262
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	12/04/2013 16:19	94262
Zinc	NELAP	0.0021	0.01		0.0127	mg/L	1	12/04/2013 16:19	94262
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	12/04/2013 11:08	94264
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	12/04/2013 15:48	94264
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	12/04/2013 13:26	94266
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.45	4.72		< 4.72	mg/Kg-dry	1	12/03/2013 21:08	94238
Arsenic	NELAP	1.23	2.45		4.52	mg/Kg-dry	1	12/04/2013 18:20	94227
Barium	NELAP	0.25	0.49		59.8	mg/Kg-dry	1	12/03/2013 23:09	94227
Beryllium	NELAP	0.05	0.1		0.54	mg/Kg-dry	1	12/03/2013 23:09	94227
Boron	NELAP	0.98	1.96		13.6	mg/Kg-dry	1	12/04/2013 18:20	94227
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	12/03/2013 23:09	94227
Calcium	NELAP	2.45	4.9		92100	mg/Kg-dry	1	12/03/2013 23:09	94227
Chromium	NELAP	0.49	0.98	X	16.8	mg/Kg-dry	1	12/03/2013 23:09	94227
Cobalt	NELAP	0.49	0.98		7.49	mg/Kg-dry	1	12/03/2013 23:09	94227
Copper	NELAP	0.49	0.98		17.3	mg/Kg-dry	1	12/03/2013 23:09	94227
Iron	NELAP	0.98	1.96	X	18300	mg/Kg-dry	1	12/03/2013 23:09	94227
Lead	NELAP	1.96	3.92		6.93	mg/Kg-dry	1	12/03/2013 23:09	94227
Magnesium	NELAP	0.49	0.98		40800	mg/Kg-dry	1	12/03/2013 23:09	94227
Manganese	NELAP	0.25	0.49		405	mg/Kg-dry	1	12/03/2013 23:09	94227
Nickel	NELAP	0.49	0.98		18	mg/Kg-dry	1	12/03/2013 23:09	94227
Potassium	NELAP	4.9	9.8		2980	mg/Kg-dry	1	12/03/2013 23:09	94227
Silver	NELAP	0.49	0.54		< 0.54	mg/Kg-dry	1	12/03/2013 23:09	94227
Sodium	NELAP	2.45	4.9		132	mg/Kg-dry	1	12/03/2013 23:09	94227
Thallium	NELAP	2.45	2.55		< 2.55	mg/Kg-dry	1	12/03/2013 23:09	94227
Vanadium	NELAP	0.49	0.98		23.3	mg/Kg-dry	1	12/03/2013 23:09	94227
Zinc	NELAP	0.49	0.98		35.7	mg/Kg-dry	1	12/03/2013 23:09	94227

Client: Andrews Engineering, Inc.

Work Order: 13111397

Client Project: IDOT2013-033

Report Date: 09-Dec-13

Lab ID: 13111397-002

Client Sample ID: 2396-3-B23

Matrix: SOLID

Collection Date: 11/25/2013 14:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.318	0.545	S	< 0.545	mg/Kg-dry	1	12/04/2013 13:23	94237
<i>Se - Matrix interference present in sample. Confirmed by bench spike.</i>									
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.019	mg/Kg-dry	1	12/03/2013 15:05	94241
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.146	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
1,2-Dichlorobenzene	NELAP	0.175	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
1,3-Dichlorobenzene	NELAP	0.185	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
1,4-Dichlorobenzene	NELAP	0.175	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
2,4,5-Trichlorophenol	NELAP	0.104	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
2,4,6-Trichlorophenol	NELAP	0.139	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
2,4-Dichlorophenol	NELAP	0.133	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
2,4-Dimethylphenol	NELAP	0.14	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
2,4-Dinitrophenol	NELAP	0.118	1.1		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
2,4-Dinitrotoluene	NELAP	0.114	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
2,6-Dinitrotoluene	NELAP	0.119	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
2-Chloronaphthalene	NELAP	0.132	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
2-Chlorophenol	NELAP	0.14	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
2-Methylnaphthalene	NELAP	0.131	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
2-Nitroaniline	NELAP	0.1	1.1		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
2-Nitrophenol	NELAP	0.123	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
3,3'-Dichlorobenzidine	NELAP	0.22	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
3-Nitroaniline	NELAP	0.09	1.1		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
4,6-Dinitro-2-methylphenol	NELAP	0.119	1.1		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
4-Bromophenyl phenyl ether	NELAP	0.101	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
4-Chloro-3-methylphenol	NELAP	0.121	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
4-Chloroaniline	NELAP	0.133	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
4-Chlorophenyl phenyl ether	NELAP	0.109	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
4-Nitroaniline	NELAP	0.1	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
4-Nitrophenol	NELAP	0.108	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Acenaphthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Acenaphthylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Benzo(a)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Benzo(a)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Benzo(b)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Benzo(g,h,i)perylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Benzo(k)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Bis(2-chloroethoxy)methane	NELAP	0.129	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Bis(2-chloroethyl)ether	NELAP	0.156	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Bis(2-chloroisopropyl)ether	NELAP	0.125	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Bis(2-ethylhexyl)phthalate	NELAP	0.129	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Butyl benzyl phthalate	NELAP	0.111	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Carbazole		0.134	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Chrysene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Dibenzo(a,h)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Dibenzofuran	NELAP	0.139	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208

Client: Andrews Engineering, Inc.

Work Order: 13111397

Client Project: IDOT2013-033

Report Date: 09-Dec-13

Lab ID: 13111397-002

Client Sample ID: 2396-3-B23

Matrix: SOLID

Collection Date: 11/25/2013 14:50

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	0.106	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Dimethyl phthalate	NELAP	0.1	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Di-n-butyl phthalate	NELAP	0.113	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Di-n-octyl phthalate	NELAP	0.114	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Fluorene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Hexachlorobenzene	NELAP	0.108	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Hexachlorobutadiene	NELAP	0.17	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Hexachlorocyclopentadiene	NELAP	0.112	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Hexachloroethane	NELAP	0.184	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Isophorone	NELAP	0.13	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
m,p-Cresol	NELAP	0.139	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Naphthalene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Nitrobenzene	NELAP	0.137	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
N-Nitroso-di-n-propylamine	NELAP	0.121	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
N-Nitrosodiphenylamine	NELAP	0.101	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
o-Cresol	NELAP	0.13	0.55		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Pentachlorophenol	NELAP	0.726	2.2		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Phenanthrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Phenol	NELAP	0.128	0.385		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	12/03/2013 16:15	94208
Surr: 2,4,6-Tribromophenol		0	32.7-130		60.5	%REC	1	12/03/2013 16:15	94208
Surr: 2-Fluorobiphenyl		0	34.1-116		60	%REC	1	12/03/2013 16:15	94208
Surr: 2-Fluorophenol		0	30.5-99		68	%REC	1	12/03/2013 16:15	94208
Surr: Nitrobenzene-d5		0	34.1-101		49.7	%REC	1	12/03/2013 16:15	94208
Surr: Phenol-d5		0	34.9-110		74.2	%REC	1	12/03/2013 16:15	94208
Surr: p-Terphenyl-d14		0	41.7-124		71.2	%REC	1	12/03/2013 16:15	94208
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
1,1,1,2-Tetrachloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
1,1,2-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
1,1-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
1,1-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
1,2-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
1,2-Dichloropropane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
1,3-Dichloropropene, Total		0.0009	0.003		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
2-Butanone	NELAP	0.0086	0.043	J	0.026	mg/Kg-dry	1	12/03/2013 13:21	94284
2-Hexanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
4-Methyl-2-pentanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
Acetone	NELAP	0.0086	0.043		0.16	mg/Kg-dry	1	12/03/2013 13:21	94284
Benzene	NELAP	0.0004	0.001		0.002	mg/Kg-dry	1	12/03/2013 13:21	94284
Bromodichloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
Bromoform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
Bromomethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
Carbon disulfide	NELAP	0.0026	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
Carbon tetrachloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284



Laboratory Results

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Matrix: SOLID

Collection Date: 11/25/2013 14:50

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	12/03/2013 13:21	94284
Chloroethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
Chloroform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
Chloromethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
cis-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
cis-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
Dibromochloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
Ethylbenzene	NELAP	0.0009	0.004	J	0.003	mg/Kg-dry	1	12/03/2013 13:21	94284
m,p-Xylenes	NELAP	0.0009	0.004		0.006	mg/Kg-dry	1	12/03/2013 13:21	94284
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
Methylene chloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
o-Xylene	NELAP	0.0009	0.004	J	0.002	mg/Kg-dry	1	12/03/2013 13:21	94284
Styrene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
Tetrachloroethene	NELAP	0.0009	0.004	J	0.002	mg/Kg-dry	1	12/03/2013 13:21	94284
Toluene	NELAP	0.0009	0.004		0.004	mg/Kg-dry	1	12/03/2013 13:21	94284
trans-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
trans-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
Trichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
Vinyl acetate	NELAP	0.0172	0.043		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	12/03/2013 13:21	94284
Xylenes, Total	NELAP	0.0009	0.004		0.008	mg/Kg-dry	1	12/03/2013 13:21	94284
Surr: 1,2-Dichloroethane-d4		0	72.2-131		114.6	%REC	1	12/03/2013 13:21	94284
Surr: 4-Bromofluorobenzene		0	82.1-116		108.1	%REC	1	12/03/2013 13:21	94284
Surr: Dibromofluoromethane		0	77.7-120		104	%REC	1	12/03/2013 13:21	94284
Surr: Toluene-d8		0	86-116		101.2	%REC	1	12/03/2013 13:21	94284



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13111397

Client Project: IDOT2013-033

Report Date: 09-Dec-13

Lab ID: 13111397-003

Client Sample ID: 2396-3-B24

Matrix: SOLID

Collection Date: 11/25/2013 15:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		16.2	%	1	11/27/2013 15:00	R184629
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		83.8	%	1	11/27/2013 15:00	R184629
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.96		1	12/02/2013 20:23	R184642
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0282	mg/L	1	12/04/2013 16:23	94262
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	12/04/2013 16:23	94262
Boron	NELAP	1	2		< 2	mg/L	1	12/04/2013 16:23	94262
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	12/04/2013 16:23	94262
Chromium	NELAP	0.004	0.01		< 0.01	mg/L	1	12/04/2013 16:23	94262
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	12/04/2013 16:23	94262
Iron	NELAP	0.007	0.02		1.8	mg/L	1	12/04/2013 16:23	94262
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	12/04/2013 16:23	94262
Manganese	NELAP	0.0016	0.005		0.0077	mg/L	1	12/04/2013 16:23	94262
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	12/04/2013 16:23	94262
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	12/04/2013 16:23	94262
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	12/04/2013 16:23	94262
Zinc	NELAP	0.0021	0.01	J	0.0055	mg/L	1	12/04/2013 16:23	94262
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	12/04/2013 11:12	94264
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	12/04/2013 15:51	94264
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	12/04/2013 13:29	94266
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.45	4.72		< 4.72	mg/Kg-dry	1	12/03/2013 21:30	94238
Arsenic	NELAP	1.16	2.31		6.37	mg/Kg-dry	1	12/03/2013 23:15	94227
Barium	NELAP	0.23	0.46		90.1	mg/Kg-dry	1	12/03/2013 23:15	94227
Beryllium	NELAP	0.05	0.09		0.59	mg/Kg-dry	1	12/03/2013 23:15	94227
Boron	NELAP	0.93	1.85		7.72	mg/Kg-dry	1	12/04/2013 18:26	94227
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	12/03/2013 23:15	94227
Calcium	NELAP	2.31	4.63		49100	mg/Kg-dry	1	12/03/2013 23:15	94227
Chromium	NELAP	0.46	0.93	X	22.8	mg/Kg-dry	1	12/03/2013 23:15	94227
Cobalt	NELAP	0.46	0.93		4.53	mg/Kg-dry	1	12/03/2013 23:15	94227
Copper	NELAP	0.46	0.93		14.7	mg/Kg-dry	1	12/03/2013 23:15	94227
Iron	NELAP	0.93	1.85	X	20400	mg/Kg-dry	1	12/03/2013 23:15	94227
Lead	NELAP	1.85	3.7		8.46	mg/Kg-dry	1	12/03/2013 23:15	94227
Magnesium	NELAP	0.46	0.93		29600	mg/Kg-dry	1	12/03/2013 23:15	94227
Manganese	NELAP	0.23	0.46		272	mg/Kg-dry	1	12/03/2013 23:15	94227
Nickel	NELAP	0.46	0.93		13.5	mg/Kg-dry	1	12/03/2013 23:15	94227
Potassium	NELAP	4.63	9.26		1420	mg/Kg-dry	1	12/03/2013 23:15	94227
Silver	NELAP	0.46	0.51		< 0.51	mg/Kg-dry	1	12/03/2013 23:15	94227
Sodium	NELAP	2.31	4.63		119	mg/Kg-dry	1	12/03/2013 23:15	94227
Thallium	NELAP	2.31	2.41		< 2.41	mg/Kg-dry	1	12/03/2013 23:15	94227
Vanadium	NELAP	0.46	0.93		36.8	mg/Kg-dry	1	12/03/2013 23:15	94227
Zinc	NELAP	0.46	0.93		36.2	mg/Kg-dry	1	12/03/2013 23:15	94227



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13111397

Client Project: IDOT2013-033

Report Date: 09-Dec-13

Lab ID: 13111397-003

Client Sample ID: 2396-3-B24

Matrix: SOLID

Collection Date: 11/25/2013 15:00

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	12/03/2013 14:25	94237
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.016	mg/Kg-dry	1	12/03/2013 15:12	94241
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.159	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
1,2-Dichlorobenzene	NELAP	0.19	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
1,3-Dichlorobenzene	NELAP	0.2	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
1,4-Dichlorobenzene	NELAP	0.19	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
2,4,5-Trichlorophenol	NELAP	0.113	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
2,4,6-Trichlorophenol	NELAP	0.15	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
2,4-Dichlorophenol	NELAP	0.144	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
2,4-Dimethylphenol	NELAP	0.151	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
2,4-Dinitrophenol	NELAP	0.128	1.19		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
2,4-Dinitrotoluene	NELAP	0.124	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
2,6-Dinitrotoluene	NELAP	0.129	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
2-Chloronaphthalene	NELAP	0.143	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
2-Chlorophenol	NELAP	0.151	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
2-Methylnaphthalene	NELAP	0.142	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
2-Nitroaniline	NELAP	0.109	1.19		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
2-Nitrophenol	NELAP	0.134	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
3,3'-Dichlorobenzidine	NELAP	0.239	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
3-Nitroaniline	NELAP	0.098	1.19		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
4,6-Dinitro-2-methylphenol	NELAP	0.129	1.19		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
4-Bromophenyl phenyl ether	NELAP	0.11	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
4-Chloro-3-methylphenol	NELAP	0.131	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
4-Chloroaniline	NELAP	0.144	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
4-Chlorophenyl phenyl ether	NELAP	0.118	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
4-Nitroaniline	NELAP	0.109	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
4-Nitrophenol	NELAP	0.117	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Acenaphthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Acenaphthylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Benzo(a)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Benzo(a)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Benzo(b)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Benzo(g,h,i)perylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Benzo(k)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Bis(2-chloroethoxy)methane	NELAP	0.14	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Bis(2-chloroethyl)ether	NELAP	0.169	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Bis(2-chloroisopropyl)ether	NELAP	0.136	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Bis(2-ethylhexyl)phthalate	NELAP	0.14	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Butyl benzyl phthalate	NELAP	0.12	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Carbazole		0.145	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Chrysene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Dibenzo(a,h)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Dibenzofuran	NELAP	0.15	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Diethyl phthalate	NELAP	0.114	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13111397

Client Project: IDOT2013-033

Report Date: 09-Dec-13

Lab ID: 13111397-003

Client Sample ID: 2396-3-B24

Matrix: SOLID

Collection Date: 11/25/2013 15:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
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SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

Dimethyl phthalate	NELAP	0.109	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Di-n-butyl phthalate	NELAP	0.123	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Di-n-octyl phthalate	NELAP	0.124	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Fluorene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Hexachlorobenzene	NELAP	0.117	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Hexachlorobutadiene	NELAP	0.185	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Hexachlorocyclopentadiene	NELAP	0.122	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Hexachloroethane	NELAP	0.199	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Isophorone	NELAP	0.141	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
m,p-Cresol	NELAP	0.15	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Naphthalene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Nitrobenzene	NELAP	0.149	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
N-Nitroso-di-n-propylamine	NELAP	0.131	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
N-Nitrosodiphenylamine	NELAP	0.11	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
o-Cresol	NELAP	0.141	0.596		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Pentachlorophenol	NELAP	0.787	2.39		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Phenanthrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Phenol	NELAP	0.138	0.417		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	12/03/2013 16:50	94208
Surr: 2,4,6-Tribromophenol		0	32.7-130		61.5	%REC	1	12/03/2013 16:50	94208
Surr: 2-Fluorobiphenyl		0	34.1-116		62.9	%REC	1	12/03/2013 16:50	94208
Surr: 2-Fluorophenol		0	30.5-99		70.3	%REC	1	12/03/2013 16:50	94208
Surr: Nitrobenzene-d5		0	34.1-101		50.5	%REC	1	12/03/2013 16:50	94208
Surr: Phenol-d5		0	34.9-110		76.2	%REC	1	12/03/2013 16:50	94208
Surr: p-Terphenyl-d14		0	41.7-124		72.9	%REC	1	12/03/2013 16:50	94208

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

1,1,1-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
1,1,1,2-Tetrachloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
1,1,2-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
1,1-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
1,1-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
1,2-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
1,2-Dichloropropane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
1,3-Dichloropropene, Total		0.0009	0.003		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
2-Butanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
2-Hexanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
4-Methyl-2-pentanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Acetone	NELAP	0.0086	0.043	J	0.036	mg/Kg-dry	1	12/03/2013 13:47	94284
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Bromodichloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Bromoform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Bromomethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Carbon disulfide	NELAP	0.0026	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Carbon tetrachloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Chlorobenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13111397

Client Project: IDOT2013-033

Report Date: 09-Dec-13

Lab ID: 13111397-003

Client Sample ID: 2396-3-B24

Matrix: SOLID

Collection Date: 11/25/2013 15:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Chloroform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Chloromethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
cis-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
cis-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Dibromochloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Ethylbenzene	NELAP	0.0009	0.004	J	0.001	mg/Kg-dry	1	12/03/2013 13:47	94284
m,p-Xylenes	NELAP	0.0009	0.004	J	0.002	mg/Kg-dry	1	12/03/2013 13:47	94284
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Methylene chloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
o-Xylene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Styrene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Tetrachloroethene	NELAP	0.0009	0.004	J	0.001	mg/Kg-dry	1	12/03/2013 13:47	94284
Toluene	NELAP	0.0009	0.004	J	0.001	mg/Kg-dry	1	12/03/2013 13:47	94284
trans-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
trans-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Trichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Vinyl acetate	NELAP	0.0171	0.043		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	12/03/2013 13:47	94284
Xylenes, Total	NELAP	0.0009	0.004	J	0.002	mg/Kg-dry	1	12/03/2013 13:47	94284
Surr: 1,2-Dichloroethane-d4		0	72.2-131		103.4	%REC	1	12/03/2013 13:47	94284
Surr: 4-Bromofluorobenzene		0	82.1-116		101.9	%REC	1	12/03/2013 13:47	94284
Surr: Dibromofluoromethane		0	77.7-120		93	%REC	1	12/03/2013 13:47	94284
Surr: Toluene-d8		0	86-116		98.6	%REC	1	12/03/2013 13:47	94284



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13111397

Client Project: IDOT2013-033

Report Date: 09-Dec-13

Lab ID: 13111397-006

Client Sample ID: 2396-3-B21

Matrix: SOLID

Collection Date: 11/25/2013 15:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		20	%	1	11/27/2013 15:01	R184629
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		80	%	1	11/27/2013 15:01	R184629
SW-846 9045C									
pH (1:1)	NELAP	0	1		6.98		1	12/02/2013 20:33	R184642
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.07	0.2		0.223	mg/L	1	12/09/2013 14:00	94395
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0843	mg/L	1	12/04/2013 16:48	94262
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	12/04/2013 16:48	94262
Boron	NELAP	1	2		< 2	mg/L	1	12/04/2013 16:48	94262
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	12/04/2013 16:48	94262
Chromium	NELAP	0.004	0.01		0.0112	mg/L	1	12/04/2013 16:48	94262
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	12/04/2013 16:48	94262
Iron	NELAP	0.007	0.02	X	8.21	mg/L	1	12/04/2013 16:48	94262
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	12/04/2013 16:48	94262
Manganese	NELAP	0.0016	0.005		0.0254	mg/L	1	12/04/2013 16:48	94262
Nickel	NELAP	0.0033	0.01	J	0.0057	mg/L	1	12/04/2013 16:48	94262
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	12/04/2013 16:48	94262
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	12/04/2013 16:48	94262
Zinc	NELAP	0.0021	0.01		0.0211	mg/L	1	12/04/2013 16:48	94262
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	12/04/2013 13:17	94264
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	12/04/2013 16:08	94264
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	12/04/2013 13:40	94266
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	12/03/2013 21:41	94238
Arsenic	NELAP	1.14	2.27		7.02	mg/Kg-dry	1	12/03/2013 23:33	94227
Barium	NELAP	0.23	0.45		178	mg/Kg-dry	1	12/03/2013 23:33	94227
Beryllium	NELAP	0.05	0.09		1.05	mg/Kg-dry	1	12/03/2013 23:33	94227
Boron	NELAP	0.91	1.82		7.15	mg/Kg-dry	1	12/04/2013 18:44	94227
Cadmium	NELAP	0.09	0.18		< 0.18	mg/Kg-dry	1	12/03/2013 23:33	94227
Calcium	NELAP	2.27	4.55		4420	mg/Kg-dry	1	12/03/2013 23:33	94227
Chromium	NELAP	0.45	0.91	X	29.5	mg/Kg-dry	1	12/03/2013 23:33	94227
Cobalt	NELAP	0.45	0.91		6.82	mg/Kg-dry	1	12/03/2013 23:33	94227
Copper	NELAP	0.45	0.91		18.2	mg/Kg-dry	1	12/03/2013 23:33	94227
Iron	NELAP	0.91	1.82	X	27700	mg/Kg-dry	1	12/03/2013 23:33	94227
Lead	NELAP	1.82	3.64		12.6	mg/Kg-dry	1	12/03/2013 23:33	94227
Magnesium	NELAP	0.45	0.91		5040	mg/Kg-dry	1	12/03/2013 23:33	94227
Manganese	NELAP	0.23	0.45		315	mg/Kg-dry	1	12/03/2013 23:33	94227
Nickel	NELAP	0.45	0.91		23.1	mg/Kg-dry	1	12/03/2013 23:33	94227
Potassium	NELAP	4.55	9.09		1970	mg/Kg-dry	1	12/03/2013 23:33	94227
Silver	NELAP	0.45	0.5		< 0.5	mg/Kg-dry	1	12/03/2013 23:33	94227
Sodium	NELAP	2.27	4.55		60.9	mg/Kg-dry	1	12/03/2013 23:33	94227
Thallium	NELAP	2.27	2.36		< 2.36	mg/Kg-dry	1	12/03/2013 23:33	94227

Client: Andrews Engineering, Inc.

Work Order: 13111397

Client Project: IDOT2013-033

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Matrix: SOLID

Collection Date: 11/25/2013 15:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.45	0.91		46	mg/Kg-dry	1	12/03/2013 23:33	94227
Zinc	NELAP	0.45	0.91		61.9	mg/Kg-dry	1	12/03/2013 23:33	94227
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588		< 0.588	mg/Kg-dry	1	12/03/2013 14:42	94237
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.05	mg/Kg-dry	1	12/03/2013 15:18	94241
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	12/03/2013 18:33	94208
1,2-Dichlorobenzene	NELAP	0.199	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
1,3-Dichlorobenzene	NELAP	0.21	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
1,4-Dichlorobenzene	NELAP	0.199	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
2,4,5-Trichlorophenol	NELAP	0.119	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
2,4,6-Trichlorophenol	NELAP	0.157	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
2,4-Dichlorophenol	NELAP	0.151	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
2,4-Dimethylphenol	NELAP	0.159	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
2,4-Dinitrophenol	NELAP	0.134	1.25		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
2,4-Dinitrotoluene	NELAP	0.13	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
2,6-Dinitrotoluene	NELAP	0.135	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
2-Chloronaphthalene	NELAP	0.15	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
2-Chlorophenol	NELAP	0.159	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
2-Methylnaphthalene	NELAP	0.149	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
2-Nitroaniline	NELAP	0.114	1.25		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
2-Nitrophenol	NELAP	0.14	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
3,3'-Dichlorobenzidine	NELAP	0.25	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
3-Nitroaniline	NELAP	0.102	1.25		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
4,6-Dinitro-2-methylphenol	NELAP	0.135	1.25		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
4-Bromophenyl phenyl ether	NELAP	0.115	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
4-Chloro-3-methylphenol	NELAP	0.137	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
4-Chloroaniline	NELAP	0.151	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
4-Chlorophenyl phenyl ether	NELAP	0.124	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
4-Nitroaniline	NELAP	0.114	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
4-Nitrophenol	NELAP	0.122	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Acenaphthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Acenaphthylene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Benzo(a)anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Benzo(a)pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Benzo(b)fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Benzo(g,h,i)perylene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Benzo(k)fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Bis(2-chloroethoxy)methane	NELAP	0.146	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Bis(2-chloroethyl)ether	NELAP	0.177	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Bis(2-chloroisopropyl)ether	NELAP	0.142	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Bis(2-ethylhexyl)phthalate	NELAP	0.146	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Butyl benzyl phthalate	NELAP	0.126	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Carbazole		0.152	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Chrysene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208



Laboratory Results

<http://www.teklabinc.com/>

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Client Project: IDOT2013-033

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Client Sample ID: 2396-3-B21

Matrix: SOLID

Collection Date: 11/25/2013 15:40

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	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Dibenzofuran	NELAP	0.157	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Diethyl phthalate	NELAP	0.12	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Dimethyl phthalate	NELAP	0.114	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Di-n-butyl phthalate	NELAP	0.129	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Di-n-octyl phthalate	NELAP	0.13	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Fluorene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Hexachlorobenzene	NELAP	0.122	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Hexachlorobutadiene	NELAP	0.194	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Hexachlorocyclopentadiene	NELAP	0.127	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Hexachloroethane	NELAP	0.209	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Indeno(1,2,3-cd)pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Isophorone	NELAP	0.147	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
m,p-Cresol	NELAP	0.157	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Naphthalene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Nitrobenzene	NELAP	0.156	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
N-Nitroso-di-n-propylamine	NELAP	0.137	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
N-Nitrosodiphenylamine	NELAP	0.115	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
o-Cresol	NELAP	0.147	0.624		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Pentachlorophenol	NELAP	0.824	2.5		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Phenanthrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Phenol	NELAP	0.145	0.437		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	12/03/2013 18:33	94208
Surr: 2,4,6-Tribromophenol		0	32.7-130		57.5	%REC	1	12/03/2013 18:33	94208
Surr: 2-Fluorobiphenyl		0	34.1-116		52.7	%REC	1	12/03/2013 18:33	94208
Surr: 2-Fluorophenol		0	30.5-99		58	%REC	1	12/03/2013 18:33	94208
Surr: Nitrobenzene-d5		0	34.1-101		43.9	%REC	1	12/03/2013 18:33	94208
Surr: Phenol-d5		0	34.9-110		66.6	%REC	1	12/03/2013 18:33	94208
Surr: p-Terphenyl-d14		0	41.7-124		70.4	%REC	1	12/03/2013 18:33	94208
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
2-Butanone	NELAP	0.0083	0.041		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
2-Hexanone	NELAP	0.0083	0.041		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
4-Methyl-2-pentanone	NELAP	0.0083	0.041		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Acetone	NELAP	0.0083	0.041	J	0.029	mg/Kg-dry	1	12/04/2013 15:15	94302
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Bromomethane	NELAP	0.0017	0.008		ND	mg/Kg-dry	1	12/04/2013 15:15	94302



Laboratory Results

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Matrix: SOLID

Collection Date: 11/25/2013 15:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbon disulfide	NELAP	0.0025	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Chloroethane	NELAP	0.0017	0.008		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Chloromethane	NELAP	0.0017	0.008		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Ethylbenzene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	12/04/2013 15:15	94302
m,p-Xylenes	NELAP	0.0008	0.004	J	0.003	mg/Kg-dry	1	12/04/2013 15:15	94302
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Tetrachloroethene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	12/04/2013 15:15	94302
Toluene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	12/04/2013 15:15	94302
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Vinyl acetate	NELAP	0.0166	0.041		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	12/04/2013 15:15	94302
Xylenes, Total	NELAP	0.0008	0.004	J	0.003	mg/Kg-dry	1	12/04/2013 15:15	94302
Surr: 1,2-Dichloroethane-d4		0	72.2-131		113	%REC	1	12/04/2013 15:15	94302
Surr: 4-Bromofluorobenzene		0	82.1-116		102.3	%REC	1	12/04/2013 15:15	94302
Surr: Dibromofluoromethane		0	77.7-120		101.3	%REC	1	12/04/2013 15:15	94302
Surr: Toluene-d8		0	86-116		98.9	%REC	1	12/04/2013 15:15	94302



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: FAP 525 (US Route 20) Office Phone Number, if available: _____

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

44W 700 block of Allen Road

City: Unincorporated State: IL Zip Code: 60140

County: Kane Township: Hampshire

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

Latitude: 42.10175 Longitude: -88.48420
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: _____

PO Box: _____

City: Schaumburg State: IL

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4101

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: FAP 525 (US Route 20)
 Latitude: 42.10175 Longitude: -88.48420

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

LOCATIONS 2396-5-B01 THROUGH 2396-5-B03 WERE SAMPLED ADJACENT TO ISGS SITE 2396V-3. SEE FIGURE 2 AND TABLE 3b OF THE REVISED PRELIMINARY SITE INVESTIGATION.

- 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 ANALYTICAL REPORT - WORK ORDER NUMBERS: 13101295 and 14021327

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

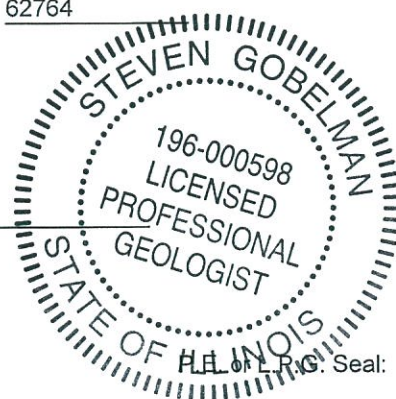
Steven Gobelman

Printed Name:

Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

8/23/14

Date:



THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl Acetate
Vinyl Chloride
Xylenes, total
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 2396V-3
Agricultural Land**

Sample ID	2396-5-B01	2396-5-B02-1	2396-5-B02-1 DUP	2396-5-B02-2	¹ Most Stringent MAC	² Outside a Populated Area MAC	³ Populated non-Metropolitan Statistical Area MAC	⁴ Within Chicago Corporate Limits MAC	⁵ Metropolitan Statistical Area MAC	⁶ Class I Soil TCLP/SPLP Comparisons Only
Sample Depth (ft)	0-5.5	0-5.5	0-5.5	5.5-11						
Sample Date	10/23/2013	10/23/2013	10/23/2013	2/27/2014						
PID	0	0	0	0						
Sample pH	8.18	7.6	7.68	8.47						
Matrix	Soil	Soil	Soil	Soil						
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	ND	ND	ND	ND	0.09	0.09	0.98	1.3	2.1	NA
Inorganic Compounds, Total (mg/kg)										
Arsenic	11.4	1.3	8.52	5.83	2.9	11.3	NA	11.3	NA	13

Sample ID	2396-5-B03-1	2396-5-B03-2	2396-5-B03-2 DUP	¹ Most Stringent MAC	² Outside a Populated Area MAC	³ Populated non-Metropolitan Statistical Area MAC	⁴ Within Chicago Corporate Limits MAC	⁵ Metropolitan Statistical Area MAC	⁶ Class I Soil TCLP/SPLP Comparisons Only	
Sample Depth (ft)	0-5.5	5.5-11	5.5-11							
Sample Date	10/23/2013	2/27/2014	2/27/2014							
PID	0	0	0							
Sample pH	8.64	8.87	8.31							
Matrix	Soil	Soil	Soil							
Semivolatile Organic Compounds (mg/kg)										
Benzo(a)pyrene	ND	0.105	1.2	ND	0.09	0.09	0.98	1.3	2.1	NA
Inorganic Compounds, Total (mg/kg)										
Arsenic	4.05	5.93	ND	11.3	NA	11.3	NA	13	NA	

November 04, 2013

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



RE: IDOT2013-033

WorkOrder: 13101295

Dear Colleen Grey:

TEKLAB, INC received 4 samples on 10/25/2013 9:10:00 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
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

This reporting package includes the following:

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Laboratory Results	5
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Chain of Custody	Appended

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

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: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Cooler Receipt Temp: 2.4 °C

Locations and Accreditations

	<u>Collinsville</u>	<u>Springfield</u>	<u>Kansas City</u>	<u>Collinsville Air</u>
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	3920 Pintail Dr Springfield, IL 62711-9415	8421 Nieman Road Lenexa, KS 66214	5445 Horseshoe Lake Road 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

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



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-001

Client Sample ID: 2396-5-B01

Matrix: SOLID

Collection Date: 10/23/2013 12:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		14	%	1	10/25/2013 15:02	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		86	%	1	10/25/2013 15:02	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.18		1	10/25/2013 18:39	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	11/01/2013 11:11	93269
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.071	mg/L	1	10/29/2013 14:56	93140
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 14:56	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 14:56	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 14:56	93140
Chromium	NELAP	0.004	0.01	J	0.0066	mg/L	1	10/29/2013 14:56	93140
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 14:56	93140
Iron	NELAP	0.007	0.02	X	5.35	mg/L	1	10/29/2013 14:56	93140
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 14:56	93140
Manganese	NELAP	0.0016	0.005		0.0208	mg/L	1	10/29/2013 14:56	93140
Nickel	NELAP	0.0033	0.01	J	0.0034	mg/L	1	10/29/2013 14:56	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 14:56	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 14:56	93140
Zinc	NELAP	0.0021	0.01		0.0156	mg/L	1	10/29/2013 14:56	93140
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	10/30/2013 10:11	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002	J	0.0006	mg/L	1	10/29/2013 16:19	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 13:46	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.41	4.63		< 4.63	mg/Kg-dry	1	10/29/2013 22:23	93118
Arsenic	NELAP	1.2	2.4	X	11.4	mg/Kg-dry	1	10/29/2013 10:41	93107
Barium	NELAP	0.24	0.48		69.2	mg/Kg-dry	1	10/29/2013 10:41	93107
Beryllium	NELAP	0.05	0.1		0.55	mg/Kg-dry	1	10/29/2013 10:41	93107
Boron	NELAP	0.96	1.92		6.6	mg/Kg-dry	1	10/29/2013 10:41	93107
Cadmium	NELAP	0.1	0.19		< 0.19	mg/Kg-dry	1	10/29/2013 10:41	93107
Calcium	NELAP	2.4	4.81		41400	mg/Kg-dry	1	10/29/2013 10:41	93107
Chromium	NELAP	0.48	0.96	X	19	mg/Kg-dry	1	10/29/2013 10:41	93107
Cobalt	NELAP	0.48	0.96		4.46	mg/Kg-dry	1	10/29/2013 10:41	93107
Copper	NELAP	0.48	0.96		18.4	mg/Kg-dry	1	10/29/2013 10:41	93107
Iron	NELAP	0.96	1.92	BX	21200	mg/Kg-dry	1	10/29/2013 10:41	93107
Lead	NELAP	1.92	3.85		10.7	mg/Kg-dry	1	10/29/2013 10:41	93107
Magnesium	NELAP	0.48	0.96	B	24100	mg/Kg-dry	1	10/29/2013 10:41	93107
Manganese	NELAP	0.24	0.48		314	mg/Kg-dry	1	10/29/2013 10:41	93107
Nickel	NELAP	0.48	0.96		12.9	mg/Kg-dry	1	10/29/2013 10:41	93107
Potassium	NELAP	4.81	9.62		1070	mg/Kg-dry	1	10/29/2013 10:41	93107
Silver	NELAP	0.48	1.06		< 1.06	mg/Kg-dry	1	10/29/2013 10:41	93107
Sodium	NELAP	2.4	4.81		506	mg/Kg-dry	1	10/29/2013 10:41	93107
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	10/29/2013 10:41	93107

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-001

Client Sample ID: 2396-5-B01

Matrix: SOLID

Collection Date: 10/23/2013 12:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.48	0.96		30	mg/Kg-dry	1	10/29/2013 10:41	93107
Zinc	NELAP	0.48	0.96		33.2	mg/Kg-dry	1	10/29/2013 10:41	93107
<i>Sample results for Fe and Mg exceed 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume 1, Module 4, section 1.7.4.1).</i>									
<i>Ag - Elevated reporting limit due to high levels of target analytes.</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588		< 0.588	mg/Kg-dry	1	10/31/2013 10:19	93116
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.024	mg/Kg-dry	1	10/28/2013 11:22	93083
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.155	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
1,2-Dichlorobenzene	NELAP	0.185	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
1,3-Dichlorobenzene	NELAP	0.195	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
1,4-Dichlorobenzene	NELAP	0.185	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
2,4,5-Trichlorophenol	NELAP	0.11	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
2,4,6-Trichlorophenol	NELAP	0.147	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
2,4-Dichlorophenol	NELAP	0.141	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
2,4-Dimethylphenol	NELAP	0.148	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
2,4-Dinitrophenol	NELAP	0.124	1.16		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
2,4-Dinitrotoluene	NELAP	0.121	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
2,6-Dinitrotoluene	NELAP	0.126	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
2-Chloronaphthalene	NELAP	0.14	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
2-Chlorophenol	NELAP	0.148	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
2-Methylnaphthalene	NELAP	0.138	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
2-Nitroaniline	NELAP	0.106	1.16		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
2-Nitrophenol	NELAP	0.13	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
3,3'-Dichlorobenzidine	NELAP	0.233	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
3-Nitroaniline	NELAP	0.095	1.16		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
4,6-Dinitro-2-methylphenol	NELAP	0.126	1.16		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
4-Bromophenyl phenyl ether	NELAP	0.107	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
4-Chloro-3-methylphenol	NELAP	0.128	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
4-Chloroaniline	NELAP	0.141	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
4-Chlorophenyl phenyl ether	NELAP	0.115	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
4-Nitroaniline	NELAP	0.106	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
4-Nitrophenol	NELAP	0.114	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Acenaphthene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Acenaphthylene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Anthracene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Benzo(a)anthracene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Benzo(a)pyrene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Benzo(b)fluoranthene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Benzo(g,h,i)perylene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Benzo(k)fluoranthene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Bis(2-chloroethoxy)methane	NELAP	0.136	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Bis(2-chloroethyl)ether	NELAP	0.165	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Bis(2-chloroisopropyl)ether	NELAP	0.133	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Bis(2-ethylhexyl)phthalate	NELAP	0.136	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-001

Client Sample ID: 2396-5-B01

Matrix: SOLID

Collection Date: 10/23/2013 12:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Butyl benzyl phthalate	NELAP	0.117	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Carbazole		0.142	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Chrysene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Dibenzo(a,h)anthracene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Dibenzofuran	NELAP	0.147	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Diethyl phthalate	NELAP	0.112	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Dimethyl phthalate	NELAP	0.106	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Di-n-butyl phthalate	NELAP	0.12	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Di-n-octyl phthalate	NELAP	0.121	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Fluoranthene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Fluorene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Hexachlorobenzene	NELAP	0.114	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Hexachlorobutadiene	NELAP	0.18	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Hexachlorocyclopentadiene	NELAP	0.119	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Hexachloroethane	NELAP	0.194	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Isophorone	NELAP	0.137	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
m,p-Cresol	NELAP	0.147	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Naphthalene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Nitrobenzene	NELAP	0.145	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
N-Nitroso-di-n-propylamine	NELAP	0.128	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
N-Nitrosodiphenylamine	NELAP	0.107	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
o-Cresol	NELAP	0.137	0.581		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Pentachlorophenol	NELAP	0.768	2.33		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Phenanthrene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Phenol	NELAP	0.135	0.407		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Pyrene	NELAP	0.019	0.04		ND	mg/Kg-dry	1	11/02/2013 7:27	93178
Surr: 2,4,6-Tribromophenol		0	32.7-130		64.5	%REC	1	11/02/2013 7:27	93178
Surr: 2-Fluorobiphenyl		0	34.1-116		63.6	%REC	1	11/02/2013 7:27	93178
Surr: 2-Fluorophenol		0	30.5-99		63.8	%REC	1	11/02/2013 7:27	93178
Surr: Nitrobenzene-d5		0	34.1-101		60.7	%REC	1	11/02/2013 7:27	93178
Surr: Phenol-d5		0	34.9-110		69.9	%REC	1	11/02/2013 7:27	93178
Surr: p-Terphenyl-d14		0	41.7-124		72.6	%REC	1	11/02/2013 7:27	93178
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
1,1,2,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
2-Butanone	NELAP	0.0075	0.037		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
2-Hexanone	NELAP	0.0075	0.037		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
4-Methyl-2-pentanone	NELAP	0.0075	0.037		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Acetone	NELAP	0.0075	0.037	J	0.033	mg/Kg-dry	1	10/26/2013 5:06	93122
Benzene	NELAP	0.0004	0.001		0.003	mg/Kg-dry	1	10/26/2013 5:06	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-001

Client Sample ID: 2396-5-B01

Matrix: SOLID

Collection Date: 10/23/2013 12:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Bromomethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Carbon disulfide	NELAP	0.0022	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Chlorobenzene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Chloroethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Chloromethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Ethylbenzene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 5:06	93122
m,p-Xylenes	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	10/26/2013 5:06	93122
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Methylene chloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
o-Xylene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 5:06	93122
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Toluene	NELAP	0.0007	0.004		0.005	mg/Kg-dry	1	10/26/2013 5:06	93122
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Vinyl acetate	NELAP	0.0149	0.037		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 5:06	93122
Xylenes, Total	NELAP	0.0007	0.004	J	0.003	mg/Kg-dry	1	10/26/2013 5:06	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		105.4	%REC	1	10/26/2013 5:06	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		106.3	%REC	1	10/26/2013 5:06	93122
Surr: Dibromofluoromethane		0	77.7-120		106.6	%REC	1	10/26/2013 5:06	93122
Surr: Toluene-d8		0	86-116		90	%REC	1	10/26/2013 5:06	93122

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-002

Client Sample ID: 2396-5-B02

Matrix: SOLID

Collection Date: 10/23/2013 12:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		19.3	%	1	10/25/2013 15:03	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		80.7	%	1	10/25/2013 15:03	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.6		1	10/25/2013 18:41	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	11/01/2013 11:15	93269
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0716	mg/L	1	10/29/2013 15:00	93140
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 15:00	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 15:00	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 15:00	93140
Chromium	NELAP	0.004	0.01	J	0.008	mg/L	1	10/29/2013 15:00	93140
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 15:00	93140
Iron	NELAP	0.007	0.02	X	6.28	mg/L	1	10/29/2013 15:00	93140
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 15:00	93140
Manganese	NELAP	0.0016	0.005		0.0258	mg/L	1	10/29/2013 15:00	93140
Nickel	NELAP	0.0033	0.01	J	0.0035	mg/L	1	10/29/2013 15:00	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 15:00	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 15:00	93140
Zinc	NELAP	0.0021	0.01		0.0167	mg/L	1	10/29/2013 15:00	93140
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	10/30/2013 10:37	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/29/2013 16:23	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 13:53	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.45	4.72		< 4.72	mg/Kg-dry	1	10/29/2013 22:29	93118
Arsenic	NELAP	1.16	2.31		8.52	mg/Kg-dry	1	10/29/2013 10:47	93107
Barium	NELAP	0.23	0.46		250	mg/Kg-dry	1	10/29/2013 10:47	93107
Beryllium	NELAP	0.05	0.09		0.74	mg/Kg-dry	1	10/29/2013 10:47	93107
Boron	NELAP	0.93	1.85		6.67	mg/Kg-dry	1	10/29/2013 10:47	93107
Cadmium	NELAP	0.09	0.19		1.37	mg/Kg-dry	1	10/29/2013 10:47	93107
Calcium	NELAP	2.31	4.63		4640	mg/Kg-dry	1	10/29/2013 10:47	93107
Chromium	NELAP	0.46	0.93	X	24.7	mg/Kg-dry	1	10/29/2013 10:47	93107
Cobalt	NELAP	0.46	0.93		12.2	mg/Kg-dry	1	10/29/2013 10:47	93107
Copper	NELAP	0.46	0.93		23.7	mg/Kg-dry	1	10/29/2013 10:47	93107
Iron	NELAP	0.93	1.85	BX	24300	mg/Kg-dry	1	10/29/2013 10:47	93107
Lead	NELAP	1.85	3.7		14.5	mg/Kg-dry	1	10/29/2013 10:47	93107
Magnesium	NELAP	0.46	0.93	B	4710	mg/Kg-dry	1	10/29/2013 10:47	93107
Manganese	NELAP	0.23	0.46	X	3270	mg/Kg-dry	1	10/29/2013 10:47	93107
Nickel	NELAP	0.46	0.93		76	mg/Kg-dry	1	10/29/2013 10:47	93107
Potassium	NELAP	4.63	9.26		2220	mg/Kg-dry	1	10/29/2013 10:47	93107
Silver	NELAP	0.46	0.51		< 0.51	mg/Kg-dry	1	10/29/2013 10:47	93107
Sodium	NELAP	2.31	4.63		521	mg/Kg-dry	1	10/29/2013 10:47	93107
Thallium	NELAP	2.31	2.41		< 2.41	mg/Kg-dry	1	10/29/2013 10:47	93107



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-002

Client Sample ID: 2396-5-B02

Matrix: SOLID

Collection Date: 10/23/2013 12:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.46	0.93		38.3	mg/Kg-dry	1	10/29/2013 10:47	93107
Zinc	NELAP	0.46	0.93		55.1	mg/Kg-dry	1	10/29/2013 10:47	93107
<i>Sample results for Fe and Mg exceed 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume 1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588		< 0.588	mg/Kg-dry	1	10/31/2013 10:23	93116
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.055	mg/Kg-dry	1	10/28/2013 11:24	93083
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.165	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
1,2-Dichlorobenzene	NELAP	0.197	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
1,3-Dichlorobenzene	NELAP	0.208	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
1,4-Dichlorobenzene	NELAP	0.197	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
2,4,5-Trichlorophenol	NELAP	0.118	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
2,4,6-Trichlorophenol	NELAP	0.156	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
2,4-Dichlorophenol	NELAP	0.15	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
2,4-Dimethylphenol	NELAP	0.157	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
2,4-Dinitrophenol	NELAP	0.133	1.24		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
2,4-Dinitrotoluene	NELAP	0.129	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
2,6-Dinitrotoluene	NELAP	0.134	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
2-Chloronaphthalene	NELAP	0.149	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
2-Chlorophenol	NELAP	0.157	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
2-Methylnaphthalene	NELAP	0.147	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
2-Nitroaniline	NELAP	0.113	1.24		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
2-Nitrophenol	NELAP	0.139	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
3,3'-Dichlorobenzidine	NELAP	0.248	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
3-Nitroaniline	NELAP	0.102	1.24		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
4,6-Dinitro-2-methylphenol	NELAP	0.134	1.24		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
4-Bromophenyl phenyl ether	NELAP	0.114	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
4-Chloro-3-methylphenol	NELAP	0.136	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
4-Chloroaniline	NELAP	0.15	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
4-Chlorophenyl phenyl ether	NELAP	0.123	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
4-Nitroaniline	NELAP	0.113	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
4-Nitrophenol	NELAP	0.121	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Acenaphthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Acenaphthylene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Benzo(a)anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Benzo(a)pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Benzo(b)fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Benzo(g,h,i)perylene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Benzo(k)fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Bis(2-chloroethoxy)methane	NELAP	0.145	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Bis(2-chloroethyl)ether	NELAP	0.176	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Bis(2-chloroisopropyl)ether	NELAP	0.141	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Bis(2-ethylhexyl)phthalate	NELAP	0.145	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Butyl benzyl phthalate	NELAP	0.125	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-002

Client Sample ID: 2396-5-B02

Matrix: SOLID

Collection Date: 10/23/2013 12:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbazole		0.151	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Chrysene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Dibenzo(a,h)anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Dibenzofuran	NELAP	0.156	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Diethyl phthalate	NELAP	0.119	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Dimethyl phthalate	NELAP	0.113	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Di-n-butyl phthalate	NELAP	0.128	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Di-n-octyl phthalate	NELAP	0.129	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Fluorene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Hexachlorobenzene	NELAP	0.121	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Hexachlorobutadiene	NELAP	0.192	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Hexachlorocyclopentadiene	NELAP	0.126	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Hexachloroethane	NELAP	0.207	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Indeno(1,2,3-cd)pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Isophorone	NELAP	0.146	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
m,p-Cresol	NELAP	0.156	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Naphthalene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Nitrobenzene	NELAP	0.155	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
N-Nitroso-di-n-propylamine	NELAP	0.136	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
N-Nitrosodiphenylamine	NELAP	0.114	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
o-Cresol	NELAP	0.146	0.619		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Pentachlorophenol	NELAP	0.818	2.48		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Phenanthrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Phenol	NELAP	0.144	0.434		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 8:00	93178
Surr: 2,4,6-Tribromophenol		0	32.7-130		64.2	%REC	1	11/02/2013 8:00	93178
Surr: 2-Fluorobiphenyl		0	34.1-116		62.2	%REC	1	11/02/2013 8:00	93178
Surr: 2-Fluorophenol		0	30.5-99		59.5	%REC	1	11/02/2013 8:00	93178
Surr: Nitrobenzene-d5		0	34.1-101		60	%REC	1	11/02/2013 8:00	93178
Surr: Phenol-d5		0	34.9-110		67.2	%REC	1	11/02/2013 8:00	93178
Surr: p-Terphenyl-d14		0	41.7-124		72.7	%REC	1	11/02/2013 8:00	93178
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
1,1,2,2-Tetrachloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
1,1,2-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
1,1-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
1,1-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
1,2-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
1,2-Dichloropropane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
1,3-Dichloropropene, Total		0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
2-Butanone	NELAP	0.0091	0.046		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
2-Hexanone	NELAP	0.0091	0.046		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
4-Methyl-2-pentanone	NELAP	0.0091	0.046		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Acetone	NELAP	0.0091	0.046	J	0.012	mg/Kg-dry	1	10/26/2013 5:33	93122
Benzene	NELAP	0.0005	0.001		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Bromodichloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-002

Client Sample ID: 2396-5-B02

Matrix: SOLID

Collection Date: 10/23/2013 12:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromoform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Bromomethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Carbon disulfide	NELAP	0.0027	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Carbon tetrachloride	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Chlorobenzene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Chloroethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Chloroform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Chloromethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
cis-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
cis-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Dibromochloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Ethylbenzene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
m,p-Xylenes	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Methylene chloride	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
o-Xylene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Styrene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Tetrachloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Toluene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
trans-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
trans-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Trichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Vinyl acetate	NELAP	0.0183	0.046		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Xylenes, Total	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 5:33	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		112.6	%REC	1	10/26/2013 5:33	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		108	%REC	1	10/26/2013 5:33	93122
Surr: Dibromofluoromethane		0	77.7-120		106	%REC	1	10/26/2013 5:33	93122
Surr: Toluene-d8		0	86-116		90.5	%REC	1	10/26/2013 5:33	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-003

Client Sample ID: 2396-5-B02 DUP

Matrix: SOLID

Collection Date: 10/23/2013 12:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		19.6	%	1	10/25/2013 15:03	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		80.4	%	1	10/25/2013 15:03	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.68		1	10/25/2013 18:43	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	11/01/2013 11:18	93269
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0793	mg/L	1	10/29/2013 15:11	93140
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 15:11	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 15:11	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 15:11	93140
Chromium	NELAP	0.004	0.01	J	0.0096	mg/L	1	10/29/2013 15:11	93140
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 15:11	93140
Iron	NELAP	0.007	0.02	X	7.51	mg/L	1	10/29/2013 15:11	93140
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 15:11	93140
Manganese	NELAP	0.0016	0.005		0.0441	mg/L	1	10/29/2013 15:11	93140
Nickel	NELAP	0.0033	0.01	J	0.0047	mg/L	1	10/29/2013 15:11	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 15:11	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 15:11	93140
Zinc	NELAP	0.0021	0.01		0.0243	mg/L	1	10/29/2013 15:11	93140
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	10/30/2013 10:41	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/29/2013 16:26	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 13:55	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.55	4.9		< 4.9	mg/Kg-dry	1	10/29/2013 22:35	93118
Arsenic	NELAP	1.25	2.5		5.83	mg/Kg-dry	1	10/29/2013 10:53	93107
Barium	NELAP	0.25	0.5		111	mg/Kg-dry	1	10/29/2013 10:53	93107
Beryllium	NELAP	0.05	0.1		0.74	mg/Kg-dry	1	10/29/2013 10:53	93107
Boron	NELAP	1	2		7.31	mg/Kg-dry	1	10/29/2013 10:53	93107
Cadmium	NELAP	0.1	0.2		0.2	mg/Kg-dry	1	10/29/2013 10:53	93107
Calcium	NELAP	2.5	5		4400	mg/Kg-dry	1	10/29/2013 10:53	93107
Chromium	NELAP	0.5	1	X	26.7	mg/Kg-dry	1	10/29/2013 10:53	93107
Cobalt	NELAP	0.5	1		8.35	mg/Kg-dry	1	10/29/2013 10:53	93107
Copper	NELAP	0.5	1		15.8	mg/Kg-dry	1	10/29/2013 10:53	93107
Iron	NELAP	1	2	BX	24200	mg/Kg-dry	1	10/29/2013 10:53	93107
Lead	NELAP	2	4		12.2	mg/Kg-dry	1	10/29/2013 10:53	93107
Magnesium	NELAP	0.5	1	B	4880	mg/Kg-dry	1	10/29/2013 10:53	93107
Manganese	NELAP	0.25	0.5	X	674	mg/Kg-dry	1	10/29/2013 10:53	93107
Nickel	NELAP	0.5	1		25.6	mg/Kg-dry	1	10/29/2013 10:53	93107
Potassium	NELAP	5	10		2270	mg/Kg-dry	1	10/29/2013 10:53	93107
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	10/29/2013 10:53	93107
Sodium	NELAP	2.5	5		562	mg/Kg-dry	1	10/29/2013 10:53	93107
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	10/29/2013 10:53	93107



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-003

Client Sample ID: 2396-5-B02 DUP

Matrix: SOLID

Collection Date: 10/23/2013 12:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.5	1		36	mg/Kg-dry	1	10/29/2013 10:53	93107
Zinc	NELAP	0.5	1		58.8	mg/Kg-dry	1	10/29/2013 10:53	93107
<i>Sample results for Fe and Mg exceed 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.324	0.556		< 0.556	mg/Kg-dry	1	10/31/2013 10:33	93116
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.043	mg/Kg-dry	1	10/28/2013 11:31	93083
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.165	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
1,2-Dichlorobenzene	NELAP	0.197	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
1,3-Dichlorobenzene	NELAP	0.208	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
1,4-Dichlorobenzene	NELAP	0.197	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
2,4,5-Trichlorophenol	NELAP	0.118	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
2,4,6-Trichlorophenol	NELAP	0.156	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
2,4-Dichlorophenol	NELAP	0.15	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
2,4-Dimethylphenol	NELAP	0.158	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
2,4-Dinitrophenol	NELAP	0.133	1.24		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
2,4-Dinitrotoluene	NELAP	0.129	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
2,6-Dinitrotoluene	NELAP	0.134	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
2-Chloronaphthalene	NELAP	0.149	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
2-Chlorophenol	NELAP	0.158	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
2-Methylnaphthalene	NELAP	0.148	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
2-Nitroaniline	NELAP	0.113	1.24		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
2-Nitrophenol	NELAP	0.139	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
3,3'-Dichlorobenzidine	NELAP	0.248	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
3-Nitroaniline	NELAP	0.102	1.24		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
4,6-Dinitro-2-methylphenol	NELAP	0.134	1.24		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
4-Bromophenyl phenyl ether	NELAP	0.114	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
4-Chloro-3-methylphenol	NELAP	0.136	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
4-Chloroaniline	NELAP	0.15	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
4-Chlorophenyl phenyl ether	NELAP	0.123	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
4-Nitroaniline	NELAP	0.113	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
4-Nitrophenol	NELAP	0.122	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Acenaphthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Acenaphthylene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Benzo(a)anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Benzo(a)pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Benzo(b)fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Benzo(g,h,i)perylene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Benzo(k)fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Bis(2-chloroethoxy)methane	NELAP	0.145	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Bis(2-chloroethyl)ether	NELAP	0.176	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Bis(2-chloroisopropyl)ether	NELAP	0.141	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Bis(2-ethylhexyl)phthalate	NELAP	0.145	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Butyl benzyl phthalate	NELAP	0.125	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-003

Client Sample ID: 2396-5-B02 DUP

Matrix: SOLID

Collection Date: 10/23/2013 12:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbazole		0.151	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Chrysene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Dibenzo(a,h)anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Dibenzofuran	NELAP	0.156	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Diethyl phthalate	NELAP	0.119	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Dimethyl phthalate	NELAP	0.113	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Di-n-butyl phthalate	NELAP	0.128	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Di-n-octyl phthalate	NELAP	0.129	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Fluorene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Hexachlorobenzene	NELAP	0.122	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Hexachlorobutadiene	NELAP	0.192	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Hexachlorocyclopentadiene	NELAP	0.127	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Hexachloroethane	NELAP	0.207	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Indeno(1,2,3-cd)pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Isophorone	NELAP	0.146	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
m,p-Cresol	NELAP	0.156	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Naphthalene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Nitrobenzene	NELAP	0.155	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
N-Nitroso-di-n-propylamine	NELAP	0.136	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
N-Nitrosodiphenylamine	NELAP	0.114	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
o-Cresol	NELAP	0.146	0.62		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Pentachlorophenol	NELAP	0.819	2.48		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Phenanthrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Phenol	NELAP	0.144	0.434		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 3:53	93178
Surr: 2,4,6-Tribromophenol		0	32.7-130		74	%REC	1	11/02/2013 3:53	93178
Surr: 2-Fluorobiphenyl		0	34.1-116		69.6	%REC	1	11/02/2013 3:53	93178
Surr: 2-Fluorophenol		0	30.5-99		66.3	%REC	1	11/02/2013 3:53	93178
Surr: Nitrobenzene-d5		0	34.1-101		65.7	%REC	1	11/02/2013 3:53	93178
Surr: Phenol-d5		0	34.9-110		74.2	%REC	1	11/02/2013 3:53	93178
Surr: p-Terphenyl-d14		0	41.7-124		80.7	%REC	1	11/02/2013 3:53	93178
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
1,1,2,2-Tetrachloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
1,1,2-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
1,1-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
1,1-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
1,2-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
1,2-Dichloropropane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
1,3-Dichloropropene, Total		0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
2-Butanone	NELAP	0.0091	0.046		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
2-Hexanone	NELAP	0.0091	0.046		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
4-Methyl-2-pentanone	NELAP	0.0091	0.046		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Acetone	NELAP	0.0091	0.046	J	0.041	mg/Kg-dry	1	10/26/2013 6:04	93122
Benzene	NELAP	0.0005	0.001		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Bromodichloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-003

Client Sample ID: 2396-5-B02 DUP

Matrix: SOLID

Collection Date: 10/23/2013 12:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromoform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Bromomethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Carbon disulfide	NELAP	0.0027	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Carbon tetrachloride	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Chlorobenzene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Chloroethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Chloroform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Chloromethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
cis-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
cis-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Dibromochloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Ethylbenzene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
m,p-Xylenes	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Methylene chloride	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
o-Xylene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Styrene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Tetrachloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Toluene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
trans-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
trans-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Trichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Vinyl acetate	NELAP	0.0182	0.046		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Xylenes, Total	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/26/2013 6:04	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		114.2	%REC	1	10/26/2013 6:04	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		108	%REC	1	10/26/2013 6:04	93122
Surr: Dibromofluoromethane		0	77.7-120		105.9	%REC	1	10/26/2013 6:04	93122
Surr: Toluene-d8		0	86-116		91.3	%REC	1	10/26/2013 6:04	93122

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-004

Client Sample ID: 2396-5-B03

Matrix: SOLID

Collection Date: 10/23/2013 12:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		9.1	%	1	10/25/2013 15:03	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		90.9	%	1	10/25/2013 15:03	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.64		1	10/25/2013 18:46	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	11/01/2013 11:22	93269
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	11/01/2013 11:22	93269
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.13	mg/L	1	10/29/2013 15:22	93140
Beryllium	NELAP	0.0003	0.001	J	0.0003	mg/L	1	10/29/2013 15:22	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 15:22	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 15:22	93140
Chromium	NELAP	0.004	0.01		0.0128	mg/L	1	10/29/2013 15:22	93140
Cobalt	NELAP	0.0022	0.01	J	0.0043	mg/L	1	10/29/2013 15:22	93140
Iron	NELAP	0.007	0.02	X	13.6	mg/L	1	10/29/2013 15:22	93140
Lead	NELAP	0.006	0.007	X	0.0076	mg/L	1	10/29/2013 15:22	93140
Manganese	NELAP	0.0016	0.005		0.136	mg/L	1	10/29/2013 15:22	93140
Nickel	NELAP	0.0033	0.01		0.0124	mg/L	1	10/29/2013 15:22	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 15:22	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 15:22	93140
Zinc	NELAP	0.0021	0.01		0.0505	mg/L	1	10/29/2013 15:22	93140
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	10/30/2013 10:44	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/29/2013 16:30	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 13:58	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/29/2013 22:41	93118
Arsenic	NELAP	1.23	2.45		4.05	mg/Kg-dry	1	10/29/2013 10:59	93107
Barium	NELAP	0.25	0.49		21.5	mg/Kg-dry	1	10/29/2013 10:59	93107
Beryllium	NELAP	0.05	0.1		0.23	mg/Kg-dry	1	10/29/2013 10:59	93107
Boron	NELAP	0.98	1.96		5.89	mg/Kg-dry	1	10/29/2013 10:59	93107
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	10/29/2013 10:59	93107
Calcium	NELAP	2.45	4.9		69300	mg/Kg-dry	1	10/29/2013 10:59	93107
Chromium	NELAP	0.49	0.98		7.34	mg/Kg-dry	1	10/29/2013 10:59	93107
Cobalt	NELAP	0.49	0.98		3.17	mg/Kg-dry	1	10/29/2013 10:59	93107
Copper	NELAP	0.49	0.98		9.63	mg/Kg-dry	1	10/29/2013 10:59	93107
Iron	NELAP	0.98	1.96	B	9060	mg/Kg-dry	1	10/29/2013 10:59	93107
Lead	NELAP	1.96	3.92		4.84	mg/Kg-dry	1	10/29/2013 10:59	93107
Magnesium	NELAP	0.49	0.98	B	29800	mg/Kg-dry	1	10/29/2013 10:59	93107
Manganese	NELAP	0.25	0.49		217	mg/Kg-dry	1	10/29/2013 10:59	93107
Nickel	NELAP	0.49	0.98		7.8	mg/Kg-dry	1	10/29/2013 10:59	93107
Potassium	NELAP	4.9	9.8		1020	mg/Kg-dry	1	10/29/2013 10:59	93107
Silver	NELAP	0.49	0.54		< 0.54	mg/Kg-dry	1	10/29/2013 10:59	93107
Sodium	NELAP	2.45	4.9		224	mg/Kg-dry	1	10/29/2013 10:59	93107



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-004

Client Sample ID: 2396-5-B03

Matrix: SOLID

Collection Date: 10/23/2013 12:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Thallium	NELAP	2.45	2.55		< 2.55	mg/Kg-dry	1	10/29/2013 10:59	93107
Vanadium	NELAP	0.49	0.98		13.3	mg/Kg-dry	1	10/29/2013 10:59	93107
Zinc	NELAP	0.49	0.98		25.3	mg/Kg-dry	1	10/29/2013 10:59	93107
<i>Sample results for Fe and Mg exceed 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume 1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.35	0.6		< 0.6	mg/Kg-dry	1	10/31/2013 10:36	93116
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.014	mg/Kg-dry	1	10/28/2013 11:33	93083
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.145	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
1,2-Dichlorobenzene	NELAP	0.173	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
1,3-Dichlorobenzene	NELAP	0.183	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
1,4-Dichlorobenzene	NELAP	0.173	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
2,4,5-Trichlorophenol	NELAP	0.104	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
2,4,6-Trichlorophenol	NELAP	0.137	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
2,4-Dichlorophenol	NELAP	0.132	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
2,4-Dimethylphenol	NELAP	0.139	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
2,4-Dinitrophenol	NELAP	0.117	1.09		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
2,4-Dinitrotoluene	NELAP	0.113	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
2,6-Dinitrotoluene	NELAP	0.118	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
2-Chloronaphthalene	NELAP	0.131	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
2-Chlorophenol	NELAP	0.139	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
2-Methylnaphthalene	NELAP	0.13	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
2-Nitroaniline	NELAP	0.099	1.09		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
2-Nitrophenol	NELAP	0.122	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
3,3'-Dichlorobenzidine	NELAP	0.218	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
3-Nitroaniline	NELAP	0.089	1.09		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
4,6-Dinitro-2-methylphenol	NELAP	0.118	1.09		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
4-Bromophenyl phenyl ether	NELAP	0.1	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
4-Chloro-3-methylphenol	NELAP	0.12	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
4-Chloroaniline	NELAP	0.132	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
4-Chlorophenyl phenyl ether	NELAP	0.108	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
4-Nitroaniline	NELAP	0.099	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
4-Nitrophenol	NELAP	0.107	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Acenaphthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Acenaphthylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Benzo(a)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Benzo(a)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Benzo(b)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Benzo(g,h,i)perylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Benzo(k)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Bis(2-chloroethoxy)methane	NELAP	0.128	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Bis(2-chloroethyl)ether	NELAP	0.155	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Bis(2-chloroisopropyl)ether	NELAP	0.124	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Bis(2-ethylhexyl)phthalate	NELAP	0.128	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-004

Client Sample ID: 2396-5-B03

Matrix: SOLID

Collection Date: 10/23/2013 12:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Butyl benzyl phthalate	NELAP	0.11	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Carbazole		0.133	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Chrysene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Dibenzo(a,h)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Dibenzofuran	NELAP	0.137	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Diethyl phthalate	NELAP	0.105	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Dimethyl phthalate	NELAP	0.099	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Di-n-butyl phthalate	NELAP	0.112	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Di-n-octyl phthalate	NELAP	0.113	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Fluorene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Hexachlorobenzene	NELAP	0.107	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Hexachlorobutadiene	NELAP	0.169	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Hexachlorocyclopentadiene	NELAP	0.111	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Hexachloroethane	NELAP	0.182	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Isophorone	NELAP	0.129	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
m,p-Cresol	NELAP	0.137	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Naphthalene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Nitrobenzene	NELAP	0.136	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
N-Nitroso-di-n-propylamine	NELAP	0.12	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
N-Nitrosodiphenylamine	NELAP	0.1	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
o-Cresol	NELAP	0.129	0.546		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Pentachlorophenol	NELAP	0.72	2.18		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Phenanthrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Phenol	NELAP	0.127	0.382		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	11/02/2013 4:27	93178
Surr: 2,4,6-Tribromophenol		0	32.7-130		72.2	%REC	1	11/02/2013 4:27	93178
Surr: 2-Fluorobiphenyl		0	34.1-116		69.8	%REC	1	11/02/2013 4:27	93178
Surr: 2-Fluorophenol		0	30.5-99		65.6	%REC	1	11/02/2013 4:27	93178
Surr: Nitrobenzene-d5		0	34.1-101		64.1	%REC	1	11/02/2013 4:27	93178
Surr: Phenol-d5		0	34.9-110		73.2	%REC	1	11/02/2013 4:27	93178
Surr: p-Terphenyl-d14		0	41.7-124		79.9	%REC	1	11/02/2013 4:27	93178
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
1,1,1,2,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
2-Butanone	NELAP	0.0071	0.035		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
2-Hexanone	NELAP	0.0071	0.035		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
4-Methyl-2-pentanone	NELAP	0.0071	0.035		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Acetone	NELAP	0.0071	0.035	J	0.013	mg/Kg-dry	1	10/26/2013 6:30	93122
Benzene	NELAP	0.0004	0.001		0.001	mg/Kg-dry	1	10/26/2013 6:30	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101295

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101295-004

Client Sample ID: 2396-5-B03

Matrix: SOLID

Collection Date: 10/23/2013 12:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Bromomethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Carbon disulfide	NELAP	0.0021	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Chlorobenzene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Chloroethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Chloromethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Ethylbenzene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 6:30	93122
m,p-Xylenes	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 6:30	93122
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Methylene chloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
o-Xylene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Toluene	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	10/26/2013 6:30	93122
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Vinyl acetate	NELAP	0.0142	0.035		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 6:30	93122
Xylenes, Total	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/26/2013 6:30	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		111.7	%REC	1	10/26/2013 6:30	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		109.8	%REC	1	10/26/2013 6:30	93122
Surr: Dibromofluoromethane		0	77.7-120		106	%REC	1	10/26/2013 6:30	93122
Surr: Toluene-d8		0	86-116		90.9	%REC	1	10/26/2013 6:30	93122

March 07, 2014

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



RE: IDOT2013-033

WorkOrder: 14021327

Dear Colleen Grey:

TEKLAB, INC received 3 samples on 2/28/2014 8:46:00 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
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021327

Client Project: IDOT2013-033

Report Date: 07-Mar-14

This reporting package includes the following:

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Chain of Custody	Appended

Client: Andrews Engineering, Inc.

Work Order: 14021327

Client Project: IDOT2013-033

Report Date: 07-Mar-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: 14021327

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Cooler Receipt Temp: 1.4 °C

Locations and Accreditations

	<u>Collinsville</u>	<u>Springfield</u>	<u>Kansas City</u>	<u>Collinsville Air</u>
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	3920 Pintail Dr Springfield, IL 62711-9415	8421 Nieman Road Lenexa, KS 66214	5445 Horseshoe Lake Road 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

<u>State</u>	<u>Dept</u>	<u>Cert #</u>	<u>NELAP</u>	<u>Exp Date</u>	<u>Lab</u>
Illinois	IEPA	100226	NELAP	1/31/2015	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2014	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2014	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2014	Springfield
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2014	Collinsville
Arkansas	ADEQ	88-0966		3/14/2014	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: 14021327

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021327-001

Client Sample ID: 2396-5-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 16:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		17.9	%	1	03/03/2014 13:10	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		82.1	%	1	03/03/2014 13:10	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.47		1	03/03/2014 19:14	R187768
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0484	mg/L	1	03/04/2014 18:38	96534
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 18:38	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 18:38	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 18:38	96534
Chromium	NELAP	0.004	0.01	J	0.0053	mg/L	1	03/04/2014 18:38	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 18:38	96534
Iron	NELAP	0.007	0.1		3.56	mg/L	1	03/04/2014 18:38	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 18:38	96534
Manganese	NELAP	0.0016	0.005		0.0328	mg/L	1	03/04/2014 18:38	96534
Nickel	NELAP	0.0033	0.01	J	0.0046	mg/L	1	03/04/2014 18:38	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 18:38	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 18:38	96534
Zinc	NELAP	0.0021	0.01		0.0131	mg/L	1	03/04/2014 18:38	96534
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	03/04/2014 10:06	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 18:29	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 14:03	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.41	4.63		< 4.63	mg/Kg-dry	1	03/04/2014 20:10	96508
Arsenic	NELAP	1.18	2.36		2.9	mg/Kg-dry	1	03/04/2014 13:55	96484
Barium	NELAP	0.24	0.47		39.2	mg/Kg-dry	1	03/03/2014 21:27	96484
Beryllium	NELAP	0.05	0.09		0.48	mg/Kg-dry	1	03/03/2014 21:27	96484
Boron	NELAP	0.94	1.89		11.1	mg/Kg-dry	1	03/03/2014 21:27	96484
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	03/04/2014 13:55	96484
Calcium	NELAP	2.36	4.72		80300	mg/Kg-dry	1	03/03/2014 21:27	96484
Chromium	NELAP	0.47	0.94	X	13.3	mg/Kg-dry	1	03/03/2014 21:27	96484
Cobalt	NELAP	0.47	0.94		4.7	mg/Kg-dry	1	03/03/2014 21:27	96484
Copper	NELAP	0.47	0.94		11.7	mg/Kg-dry	1	03/03/2014 21:27	96484
Iron	NELAP	0.94	1.89		11100	mg/Kg-dry	1	03/03/2014 21:27	96484
Lead	NELAP	1.89	3.77		4.19	mg/Kg-dry	1	03/03/2014 21:27	96484
Magnesium	NELAP	0.47	0.94		38000	mg/Kg-dry	1	03/03/2014 21:27	96484
Manganese	NELAP	0.24	0.47		258	mg/Kg-dry	1	03/03/2014 21:27	96484
Nickel	NELAP	0.47	0.94		11.7	mg/Kg-dry	1	03/03/2014 21:27	96484
Potassium	NELAP	4.72	9.43		1910	mg/Kg-dry	1	03/03/2014 21:27	96484
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	03/03/2014 21:27	96484
Sodium	NELAP	2.36	4.72		265	mg/Kg-dry	1	03/03/2014 21:27	96484
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	03/03/2014 21:27	96484
Vanadium	NELAP	0.47	0.94		16.7	mg/Kg-dry	1	03/03/2014 21:27	96484
Zinc	NELAP	0.47	0.94	B	21.4	mg/Kg-dry	1	03/04/2014 13:55	96484

Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).

Client: Andrews Engineering, Inc.

Work Order: 14021327

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021327-001

Client Sample ID: 2396-5-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 16:45

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	03/03/2014 8:15	96486
SW-846 7471B									
Mercury	NELAP	0.003	0.012	J	0.009	mg/Kg-dry	1	03/03/2014 14:34	96522
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.161	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
1,2-Dichlorobenzene	NELAP	0.192	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
1,3-Dichlorobenzene	NELAP	0.203	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
1,4-Dichlorobenzene	NELAP	0.192	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
2,4,5-Trichlorophenol	NELAP	0.115	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
2,4,6-Trichlorophenol	NELAP	0.152	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
2,4-Dichlorophenol	NELAP	0.146	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
2,4-Dimethylphenol	NELAP	0.153	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
2,4-Dinitrophenol	NELAP	0.129	1.21		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
2,4-Dinitrotoluene	NELAP	0.126	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
2,6-Dinitrotoluene	NELAP	0.13	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
2-Chloronaphthalene	NELAP	0.145	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
2-Chlorophenol	NELAP	0.153	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
2-Methylnaphthalene	NELAP	0.144	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
2-Nitroaniline	NELAP	0.11	1.21		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
2-Nitrophenol	NELAP	0.135	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
3,3'-Dichlorobenzidine	NELAP	0.242	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
3-Nitroaniline	NELAP	0.099	1.21		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
4,6-Dinitro-2-methylphenol	NELAP	0.13	1.21		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
4-Bromophenyl phenyl ether	NELAP	0.111	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
4-Chloro-3-methylphenol	NELAP	0.133	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
4-Chloroaniline	NELAP	0.146	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
4-Chlorophenyl phenyl ether	NELAP	0.12	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
4-Nitroaniline	NELAP	0.11	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
4-Nitrophenol	NELAP	0.118	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Acenaphthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Acenaphthylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Benzo(a)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Benzo(a)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Benzo(b)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Benzo(g,h,i)perylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Benzo(k)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Bis(2-chloroethoxy)methane	NELAP	0.141	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Bis(2-chloroethyl)ether	NELAP	0.172	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Bis(2-chloroisopropyl)ether	NELAP	0.138	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Bis(2-ethylhexyl)phthalate	NELAP	0.141	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Butyl benzyl phthalate	NELAP	0.122	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Carbazole		0.147	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Chrysene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Dibenzo(a,h)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Dibenzofuran	NELAP	0.152	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Diethyl phthalate	NELAP	0.116	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442

Client: Andrews Engineering, Inc.

Work Order: 14021327

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021327-001

Client Sample ID: 2396-5-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 16:45

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	0.11	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Di-n-butyl phthalate	NELAP	0.124	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Di-n-octyl phthalate	NELAP	0.126	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Fluorene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Hexachlorobenzene	NELAP	0.118	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Hexachlorobutadiene	NELAP	0.187	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Hexachlorocyclopentadiene	NELAP	0.123	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Hexachloroethane	NELAP	0.202	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Isophorone	NELAP	0.143	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
m,p-Cresol	NELAP	0.152	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Naphthalene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Nitrobenzene	NELAP	0.151	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
N-Nitroso-di-n-propylamine	NELAP	0.133	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
N-Nitrosodiphenylamine	NELAP	0.111	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
o-Cresol	NELAP	0.143	0.604		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Pentachlorophenol	NELAP	0.797	2.42		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Phenanthrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Phenol	NELAP	0.14	0.423		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 11:08	96442
Surr: 2,4,6-Tribromophenol		0	46-125		88.1	%REC	1	03/03/2014 11:08	96442
Surr: 2-Fluorobiphenyl		0	49.6-91.4		68.4	%REC	1	03/03/2014 11:08	96442
Surr: 2-Fluorophenol		0	51.4-93.1		73	%REC	1	03/03/2014 11:08	96442
Surr: Nitrobenzene-d5		0	32.8-110		75.7	%REC	1	03/03/2014 11:08	96442
Surr: Phenol-d5		0	57.2-100		79.3	%REC	1	03/03/2014 11:08	96442
Surr: p-Terphenyl-d14		0	61.8-117		79.4	%REC	1	03/03/2014 11:08	96442
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
1,1,2,2-Tetrachloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
1,1,2-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
1,1-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
1,1-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
1,2-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
1,2-Dichloropropane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
1,3-Dichloropropene, Total		0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
2-Butanone	NELAP	0.0092	0.046	J	0.015	mg/Kg-dry	1	02/28/2014 17:06	96521
2-Hexanone	NELAP	0.0092	0.046		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
4-Methyl-2-pentanone	NELAP	0.0092	0.046		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Acetone	NELAP	0.0092	0.046		0.07	mg/Kg-dry	1	02/28/2014 17:06	96521
Benzene	NELAP	0.0005	0.001		0.002	mg/Kg-dry	1	02/28/2014 17:06	96521
Bromodichloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Bromoform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Bromomethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Carbon disulfide	NELAP	0.0028	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Carbon tetrachloride	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Chlorobenzene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021327

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021327-001

Client Sample ID: 2396-5-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 16:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Chloroform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Chloromethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
cis-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
cis-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Dibromochloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Ethylbenzene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
m,p-Xylenes	NELAP	0.0009	0.005	J	0.001	mg/Kg-dry	1	02/28/2014 17:06	96521
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Methylene chloride	NELAP	0.0009	0.005	J	0.001	mg/Kg-dry	1	02/28/2014 17:06	96521
o-Xylene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Styrene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Tetrachloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Toluene	NELAP	0.0009	0.005	J	0.003	mg/Kg-dry	1	02/28/2014 17:06	96521
trans-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
trans-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Trichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Vinyl acetate	NELAP	0.0183	0.046		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	02/28/2014 17:06	96521
Xylenes, Total	NELAP	0.0009	0.005	J	0.001	mg/Kg-dry	1	02/28/2014 17:06	96521
Surr: 1,2-Dichloroethane-d4		0	72.2-131		116.9	%REC	1	02/28/2014 17:06	96521
Surr: 4-Bromofluorobenzene		0	82.1-116	S	116.5	%REC	1	02/28/2014 17:06	96521
Surr: Dibromofluoromethane		0	77.7-120		105.3	%REC	1	02/28/2014 17:06	96521
Surr: Toluene-d8		0	86-116		101	%REC	1	02/28/2014 17:06	96521

Surrogate recovery is outside QC limits due to matrix interference.

Client: Andrews Engineering, Inc.

Work Order: 14021327

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021327-002

Client Sample ID: 2396-5-B03-2

Matrix: SOLID

Collection Date: 02/27/2014 17:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		9.5	%	1	03/03/2014 13:04	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		90.5	%	1	03/03/2014 13:04	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.87		1	03/03/2014 19:16	R187768
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	03/06/2014 18:46	96629
Lead	NELAP	0.006	0.007	J	0.0063	mg/L	1	03/06/2014 18:46	96629
Manganese	NELAP	0.0016	0.005		2.82	mg/L	1	03/06/2014 18:46	96629
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.128	mg/L	1	03/04/2014 18:49	96534
Beryllium	NELAP	0.0003	0.001	J	0.0005	mg/L	1	03/04/2014 18:49	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 18:49	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 18:49	96534
Chromium	NELAP	0.004	0.01		0.0182	mg/L	1	03/04/2014 18:49	96534
Cobalt	NELAP	0.0022	0.01	J	0.0048	mg/L	1	03/04/2014 18:49	96534
Iron	NELAP	0.007	0.1	X	14.8	mg/L	1	03/04/2014 18:49	96534
Lead	NELAP	0.006	0.007	X	0.0188	mg/L	1	03/04/2014 18:49	96534
Manganese	NELAP	0.0016	0.005	X	0.265	mg/L	1	03/04/2014 18:49	96534
Nickel	NELAP	0.0033	0.01		0.014	mg/L	1	03/04/2014 18:49	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 18:49	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 18:49	96534
Zinc	NELAP	0.0021	0.01		0.0491	mg/L	1	03/04/2014 18:49	96534
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	03/04/2014 10:10	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 18:33	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 14:05	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	03/04/2014 20:29	96508
Arsenic	NELAP	1.23	2.45		5.93	mg/Kg-dry	1	03/04/2014 13:58	96484
Barium	NELAP	0.25	0.49		71.1	mg/Kg-dry	1	03/03/2014 21:31	96484
Beryllium	NELAP	0.05	0.1		0.52	mg/Kg-dry	1	03/03/2014 21:31	96484
Boron	NELAP	0.98	1.96		5.16	mg/Kg-dry	1	03/03/2014 21:31	96484
Cadmium	NELAP	0.1	0.2	J	0.11	mg/Kg-dry	1	03/04/2014 13:58	96484
Calcium	NELAP	2.45	4.9		38300	mg/Kg-dry	1	03/03/2014 21:31	96484
Chromium	NELAP	0.49	0.98	X	18.1	mg/Kg-dry	1	03/03/2014 21:31	96484
Cobalt	NELAP	0.49	0.98		6.29	mg/Kg-dry	1	03/03/2014 21:31	96484
Copper	NELAP	0.49	0.98		13	mg/Kg-dry	1	03/03/2014 21:31	96484
Iron	NELAP	0.98	1.96	X	15300	mg/Kg-dry	1	03/03/2014 21:31	96484
Lead	NELAP	1.96	3.92		17.2	mg/Kg-dry	1	03/03/2014 21:31	96484
Magnesium	NELAP	0.49	0.98		20100	mg/Kg-dry	1	03/03/2014 21:31	96484
Manganese	NELAP	0.25	0.49		507	mg/Kg-dry	1	03/03/2014 21:31	96484
Nickel	NELAP	0.49	0.98		13.6	mg/Kg-dry	1	03/03/2014 21:31	96484
Potassium	NELAP	4.9	9.8		1030	mg/Kg-dry	1	03/03/2014 21:31	96484
Silver	NELAP	0.49	0.54		< 0.54	mg/Kg-dry	1	03/03/2014 21:31	96484

Client: Andrews Engineering, Inc.

Work Order: 14021327

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021327-002

Client Sample ID: 2396-5-B03-2

Matrix: SOLID

Collection Date: 02/27/2014 17:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Sodium	NELAP	2.45	4.9		1600	mg/Kg-dry	1	03/03/2014 21:31	96484
Thallium	NELAP	2.45	2.55		< 2.55	mg/Kg-dry	1	03/03/2014 21:31	96484
Vanadium	NELAP	0.49	0.98		24.3	mg/Kg-dry	1	03/03/2014 21:31	96484
Zinc	NELAP	0.49	0.98	B	46.2	mg/Kg-dry	1	03/04/2014 13:58	96484
<i>Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.337	0.577		< 0.577	mg/Kg-dry	1	03/03/2014 8:18	96486
SW-846 7471B									
Mercury	NELAP	0.003	0.01		0.024	mg/Kg-dry	1	03/03/2014 14:41	96522
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.145	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
1,2-Dichlorobenzene	NELAP	0.174	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
1,3-Dichlorobenzene	NELAP	0.183	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
1,4-Dichlorobenzene	NELAP	0.174	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
2,4,5-Trichlorophenol	NELAP	0.104	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
2,4,6-Trichlorophenol	NELAP	0.138	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
2,4-Dichlorophenol	NELAP	0.132	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
2,4-Dimethylphenol	NELAP	0.139	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
2,4-Dinitrophenol	NELAP	0.117	1.09		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
2,4-Dinitrotoluene	NELAP	0.114	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
2,6-Dinitrotoluene	NELAP	0.118	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
2-Chloronaphthalene	NELAP	0.131	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
2-Chlorophenol	NELAP	0.139	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
2-Methylnaphthalene	NELAP	0.13	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
2-Nitroaniline	NELAP	0.099	1.09		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
2-Nitrophenol	NELAP	0.122	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
3,3'-Dichlorobenzidine	NELAP	0.218	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
3-Nitroaniline	NELAP	0.09	1.09		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
4,6-Dinitro-2-methylphenol	NELAP	0.118	1.09		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
4-Bromophenyl phenyl ether	NELAP	0.1	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
4-Chloro-3-methylphenol	NELAP	0.12	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
4-Chloroaniline	NELAP	0.132	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
4-Chlorophenyl phenyl ether	NELAP	0.108	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
4-Nitroaniline	NELAP	0.099	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
4-Nitrophenol	NELAP	0.107	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Acenaphthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Acenaphthylene	NELAP	0.018	0.037	J	0.031	mg/Kg-dry	1	03/03/2014 14:26	96442
Anthracene	NELAP	0.018	0.037		0.041	mg/Kg-dry	1	03/03/2014 14:26	96442
Benzo(a)anthracene	NELAP	0.018	0.037		0.132	mg/Kg-dry	1	03/03/2014 14:26	96442
Benzo(a)pyrene	NELAP	0.018	0.037		0.105	mg/Kg-dry	1	03/03/2014 14:26	96442
Benzo(b)fluoranthene	NELAP	0.018	0.037		0.151	mg/Kg-dry	1	03/03/2014 14:26	96442
Benzo(g,h,i)perylene	NELAP	0.018	0.037		0.039	mg/Kg-dry	1	03/03/2014 14:26	96442
Benzo(k)fluoranthene	NELAP	0.018	0.037		0.059	mg/Kg-dry	1	03/03/2014 14:26	96442
Bis(2-chloroethoxy)methane	NELAP	0.128	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Bis(2-chloroethyl)ether	NELAP	0.155	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Bis(2-chloroisopropyl)ether	NELAP	0.124	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Bis(2-ethylhexyl)phthalate	NELAP	0.128	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442

Client: Andrews Engineering, Inc.

Work Order: 14021327

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021327-002

Client Sample ID: 2396-5-B03-2

Matrix: SOLID

Collection Date: 02/27/2014 17:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Butyl benzyl phthalate	NELAP	0.11	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Carbazole		0.133	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Chrysene	NELAP	0.018	0.037		0.122	mg/Kg-dry	1	03/03/2014 14:26	96442
Dibenzo(a,h)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Dibenzofuran	NELAP	0.138	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Diethyl phthalate	NELAP	0.105	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Dimethyl phthalate	NELAP	0.099	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Di-n-butyl phthalate	NELAP	0.112	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Di-n-octyl phthalate	NELAP	0.114	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Fluoranthene	NELAP	0.018	0.037		0.279	mg/Kg-dry	1	03/03/2014 14:26	96442
Fluorene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Hexachlorobenzene	NELAP	0.107	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Hexachlorobutadiene	NELAP	0.169	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Hexachlorocyclopentadiene	NELAP	0.111	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Hexachloroethane	NELAP	0.182	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		0.039	mg/Kg-dry	1	03/03/2014 14:26	96442
Isophorone	NELAP	0.129	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
m,p-Cresol	NELAP	0.138	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Naphthalene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Nitrobenzene	NELAP	0.136	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
N-Nitroso-di-n-propylamine	NELAP	0.12	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
N-Nitrosodiphenylamine	NELAP	0.1	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
o-Cresol	NELAP	0.129	0.546		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Pentachlorophenol	NELAP	0.721	2.18		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Phenanthrene	NELAP	0.018	0.037		0.204	mg/Kg-dry	1	03/03/2014 14:26	96442
Phenol	NELAP	0.127	0.382		ND	mg/Kg-dry	1	03/03/2014 14:26	96442
Pyrene	NELAP	0.018	0.037		0.211	mg/Kg-dry	1	03/03/2014 14:26	96442
Surr: 2,4,6-Tribromophenol		0	46-125		85.5	%REC	1	03/03/2014 14:26	96442
Surr: 2-Fluorobiphenyl		0	49.6-91.4		70.8	%REC	1	03/03/2014 14:26	96442
Surr: 2-Fluorophenol		0	51.4-93.1		76.6	%REC	1	03/03/2014 14:26	96442
Surr: Nitrobenzene-d5		0	32.8-110		76	%REC	1	03/03/2014 14:26	96442
Surr: Phenol-d5		0	57.2-100		84.4	%REC	1	03/03/2014 14:26	96442
Surr: p-Terphenyl-d14		0	61.8-117		81.9	%REC	1	03/03/2014 14:26	96442
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
1,1,1,2,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
2-Butanone	NELAP	0.0072	0.036	J	0.011	mg/Kg-dry	1	02/28/2014 17:35	96521
2-Hexanone	NELAP	0.0072	0.036		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
4-Methyl-2-pentanone	NELAP	0.0072	0.036		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Acetone	NELAP	0.0072	0.036	J	0.028	mg/Kg-dry	1	02/28/2014 17:35	96521
Benzene	NELAP	0.0004	0.001		0.004	mg/Kg-dry	1	02/28/2014 17:35	96521



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021327

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021327-002

Client Sample ID: 2396-5-B03-2

Matrix: SOLID

Collection Date: 02/27/2014 17:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Bromomethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Carbon disulfide	NELAP	0.0022	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Chlorobenzene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Chloroethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Chloromethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Ethylbenzene	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	02/28/2014 17:35	96521
m,p-Xylenes	NELAP	0.0007	0.004	J	0.003	mg/Kg-dry	1	02/28/2014 17:35	96521
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Methylene chloride	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	02/28/2014 17:35	96521
o-Xylene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	02/28/2014 17:35	96521
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Toluene	NELAP	0.0007	0.004		0.007	mg/Kg-dry	1	02/28/2014 17:35	96521
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Vinyl acetate	NELAP	0.0144	0.036		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	02/28/2014 17:35	96521
Xylenes, Total	NELAP	0.0007	0.004		0.004	mg/Kg-dry	1	02/28/2014 17:35	96521
Surr: 1,2-Dichloroethane-d4		0	72.2-131		104.8	%REC	1	02/28/2014 17:35	96521
Surr: 4-Bromofluorobenzene		0	82.1-116		100	%REC	1	02/28/2014 17:35	96521
Surr: Dibromofluoromethane		0	77.7-120		100.5	%REC	1	02/28/2014 17:35	96521
Surr: Toluene-d8		0	86-116		97.2	%REC	1	02/28/2014 17:35	96521

Client: Andrews Engineering, Inc.

Work Order: 14021327

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021327-003

Client Sample ID: 2396-5-B03-2 DUP

Matrix: SOLID

Collection Date: 02/27/2014 17:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		11.5	%	1	03/03/2014 13:04	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		88.5	%	1	03/03/2014 13:04	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.31		1	03/03/2014 19:18	R187768
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0215	mg/L	1	03/04/2014 18:53	96534
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 18:53	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 18:53	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 18:53	96534
Chromium	NELAP	0.004	0.01		< 0.01	mg/L	1	03/04/2014 18:53	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 18:53	96534
Iron	NELAP	0.007	0.1		0.844	mg/L	1	03/04/2014 18:53	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 18:53	96534
Manganese	NELAP	0.0016	0.005		0.0103	mg/L	1	03/04/2014 18:53	96534
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	03/04/2014 18:53	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 18:53	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 18:53	96534
Zinc	NELAP	0.0021	0.01	J	0.007	mg/L	1	03/04/2014 18:53	96534
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	03/04/2014 10:13	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 18:36	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 14:07	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	03/04/2014 20:35	96508
Arsenic	NELAP	1.18	2.36		< 2.36	mg/Kg-dry	1	03/04/2014 14:02	96484
Barium	NELAP	0.24	0.47		35.5	mg/Kg-dry	1	03/03/2014 21:34	96484
Beryllium	NELAP	0.05	0.09		0.45	mg/Kg-dry	1	03/03/2014 21:34	96484
Boron	NELAP	0.94	1.89		9.57	mg/Kg-dry	1	03/03/2014 21:34	96484
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	03/04/2014 14:02	96484
Calcium	NELAP	2.36	4.72		90500	mg/Kg-dry	1	03/03/2014 21:34	96484
Chromium	NELAP	0.47	0.94		12.5	mg/Kg-dry	1	03/03/2014 21:34	96484
Cobalt	NELAP	0.47	0.94		4.26	mg/Kg-dry	1	03/03/2014 21:34	96484
Copper	NELAP	0.47	0.94		10.5	mg/Kg-dry	1	03/03/2014 21:34	96484
Iron	NELAP	0.94	1.89		10600	mg/Kg-dry	1	03/03/2014 21:34	96484
Lead	NELAP	1.89	3.77	J	3.2	mg/Kg-dry	1	03/03/2014 21:34	96484
Magnesium	NELAP	0.47	0.94		42100	mg/Kg-dry	1	03/03/2014 21:34	96484
Manganese	NELAP	0.24	0.47		251	mg/Kg-dry	1	03/03/2014 21:34	96484
Nickel	NELAP	0.47	0.94		11.5	mg/Kg-dry	1	03/03/2014 21:34	96484
Potassium	NELAP	4.72	9.43		1770	mg/Kg-dry	1	03/03/2014 21:34	96484
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	03/03/2014 21:34	96484
Sodium	NELAP	2.36	4.72		209	mg/Kg-dry	1	03/03/2014 21:34	96484
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	03/03/2014 21:34	96484
Vanadium	NELAP	0.47	0.94		15.4	mg/Kg-dry	1	03/03/2014 21:34	96484
Zinc	NELAP	0.47	0.94	B	19.6	mg/Kg-dry	1	03/04/2014 14:02	96484

Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).

Client: Andrews Engineering, Inc.

Work Order: 14021327

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021327-003

Client Sample ID: 2396-5-B03-2 DUP

Matrix: SOLID

Collection Date: 02/27/2014 17:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.33	0.566	S	< 0.566	mg/Kg-dry	1	03/03/2014 8:21	96486
<i>Se - Matrix interference present in sample. Confirmed by bench spike.</i>									
SW-846 7471B									
Mercury	NELAP	0.003	0.011	J	0.009	mg/Kg-dry	1	03/03/2014 14:43	96522
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.151	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
1,2-Dichlorobenzene	NELAP	0.18	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
1,3-Dichlorobenzene	NELAP	0.19	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
1,4-Dichlorobenzene	NELAP	0.18	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
2,4,5-Trichlorophenol	NELAP	0.108	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
2,4,6-Trichlorophenol	NELAP	0.143	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
2,4-Dichlorophenol	NELAP	0.137	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
2,4-Dimethylphenol	NELAP	0.144	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
2,4-Dinitrophenol	NELAP	0.121	1.13		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
2,4-Dinitrotoluene	NELAP	0.118	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
2,6-Dinitrotoluene	NELAP	0.122	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
2-Chloronaphthalene	NELAP	0.136	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
2-Chlorophenol	NELAP	0.144	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
2-Methylnaphthalene	NELAP	0.135	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
2-Nitroaniline	NELAP	0.103	1.13		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
2-Nitrophenol	NELAP	0.127	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
3,3'-Dichlorobenzidine	NELAP	0.226	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
3-Nitroaniline	NELAP	0.093	1.13		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
4,6-Dinitro-2-methylphenol	NELAP	0.122	1.13		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
4-Bromophenyl phenyl ether	NELAP	0.104	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
4-Chloro-3-methylphenol	NELAP	0.125	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
4-Chloroaniline	NELAP	0.137	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
4-Chlorophenyl phenyl ether	NELAP	0.112	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
4-Nitroaniline	NELAP	0.103	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
4-Nitrophenol	NELAP	0.111	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Acenaphthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Acenaphthylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Benzo(a)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Benzo(a)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Benzo(b)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Benzo(g,h,i)perylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Benzo(k)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Bis(2-chloroethoxy)methane	NELAP	0.132	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Bis(2-chloroethyl)ether	NELAP	0.161	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Bis(2-chloroisopropyl)ether	NELAP	0.129	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Bis(2-ethylhexyl)phthalate	NELAP	0.132	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Butyl benzyl phthalate	NELAP	0.114	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Carbazole		0.138	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Chrysene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Dibenzo(a,h)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Dibenzofuran	NELAP	0.143	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442

Client: Andrews Engineering, Inc.

Work Order: 14021327

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021327-003

Client Sample ID: 2396-5-B03-2 DUP

Matrix: SOLID

Collection Date: 02/27/2014 17:35

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	0.109	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Dimethyl phthalate	NELAP	0.103	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Di-n-butyl phthalate	NELAP	0.117	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Di-n-octyl phthalate	NELAP	0.118	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Fluorene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Hexachlorobenzene	NELAP	0.111	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Hexachlorobutadiene	NELAP	0.175	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Hexachlorocyclopentadiene	NELAP	0.115	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Hexachloroethane	NELAP	0.189	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Isophorone	NELAP	0.134	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
m,p-Cresol	NELAP	0.143	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Naphthalene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Nitrobenzene	NELAP	0.142	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
N-Nitroso-di-n-propylamine	NELAP	0.125	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
N-Nitrosodiphenylamine	NELAP	0.104	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
o-Cresol	NELAP	0.134	0.566		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Pentachlorophenol	NELAP	0.747	2.26		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Phenanthrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Phenol	NELAP	0.131	0.396		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/03/2014 11:41	96442
Surr: 2,4,6-Tribromophenol		0	46-125		83.3	%REC	1	03/03/2014 11:41	96442
Surr: 2-Fluorobiphenyl		0	49.6-91.4		68.1	%REC	1	03/03/2014 11:41	96442
Surr: 2-Fluorophenol		0	51.4-93.1		73.5	%REC	1	03/03/2014 11:41	96442
Surr: Nitrobenzene-d5		0	32.8-110		75	%REC	1	03/03/2014 11:41	96442
Surr: Phenol-d5		0	57.2-100		81	%REC	1	03/03/2014 11:41	96442
Surr: p-Terphenyl-d14		0	61.8-117		80.8	%REC	1	03/03/2014 11:41	96442
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
2-Butanone	NELAP	0.0075	0.038	J	0.019	mg/Kg-dry	1	03/03/2014 16:13	96551
2-Hexanone	NELAP	0.0075	0.038		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
4-Methyl-2-pentanone	NELAP	0.0075	0.038		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Acetone	NELAP	0.0075	0.038		0.083	mg/Kg-dry	1	03/03/2014 16:13	96551
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Bromomethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Carbon disulfide	NELAP	0.0023	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021327

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021327-003

Client Sample ID: 2396-5-B03-2 DUP

Matrix: SOLID

Collection Date: 02/27/2014 17:35

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	03/03/2014 16:13	96551
Chloroethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Chloromethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Ethylbenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
m,p-Xylenes	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Methylene chloride	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	03/03/2014 16:13	96551
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Toluene	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	03/03/2014 16:13	96551
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Vinyl acetate	NELAP	0.0151	0.038		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Xylenes, Total	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 16:13	96551
Surr: 1,2-Dichloroethane-d4		0	72.2-131		108.2	%REC	1	03/03/2014 16:13	96551
Surr: 4-Bromofluorobenzene		0	82.1-116	S	120.1	%REC	1	03/03/2014 16:13	96551
Surr: Dibromofluoromethane		0	77.7-120		101.9	%REC	1	03/03/2014 16:13	96551
Surr: Toluene-d8		0	86-116		99.9	%REC	1	03/03/2014 16:13	96551

Surrogate recovery is outside QC limits due to matrix interference.



CHAIN OF CUSTODY RECORD

Client Contact Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	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: <u>US Rt.20 Kane Co</u> Project No.: <u>IDOT 2013-033</u> TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>TOP/CRU</u>	COC No.: <u>1</u> of <u>1</u> Lab Job No.: <u>14021327</u> Sample Temp: <u>1.4</u>															
Special Instructions: See Table 2 for complete parameter lists and minimum reporting limits. * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal. ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.		MATRIX KEY: W: Water S: Soil SL: Sludge S: Sediment L: Leachate DW: Drinking Water OL: Oil O: Other																
ANALYSES																		
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCS	SVOCs	BTEX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	PH	% Solids	Waste Characterization	Comments		
14021327-w1	2396-5-B02-2	2/27	4:45	S	X	X					X	X	X	X		S.S-71		
-w2	2396-5-B03-2	↓	5:25	S	X	X					X	X	X	X		"		
-w3	2396-5-B03-2 DUP	↓	5:35	S	X	X					X	X	X	X		"		
Relinquished by:					Date/Time	Received by:					Date/Time	Date/Time						
Relinquished by:					2/27	8:43	Received by:					2/27	8:46	Date/Time				
Relinquished by:					Date/Time	Received by:					Date/Time	Date/Time						



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: FAP 525 (US Route 20) Office Phone Number, if available: _____

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

44W 745 Allen Road

City: Unincorporated State: IL Zip Code: 60140

County: Kane Township: Hampshire

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

Latitude: 42.10239 Longitude: -88.48490
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: _____

PO Box: _____

City: Schaumburg State: IL

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4101

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: FAP 525 (US Route 20)
 Latitude: 42.10239 Longitude: -88.48490

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located [35 Ill. Adm. Code 1100.610(a)]:

LOCATION 2396-2-B02 WAS SAMPLED ADJACENT TO ISGS SITE 2396V-4. SEE FIGURE 2 AND TABLE 3c OF THE REVISED PRELIMINARY SITE INVESTIGATION.

- 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 ANALYTICAL REPORT - WORK ORDER NUMBERS: 13101296 and 14021325

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

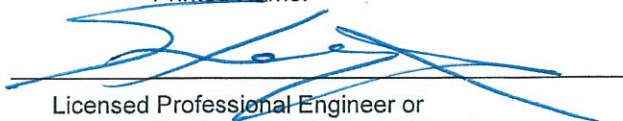
Street Address: 2300 South Dirksen Parkway

City: Springfield State: IL Zip Code: 62764

Phone: 217.785.4246

Steven Gobelman

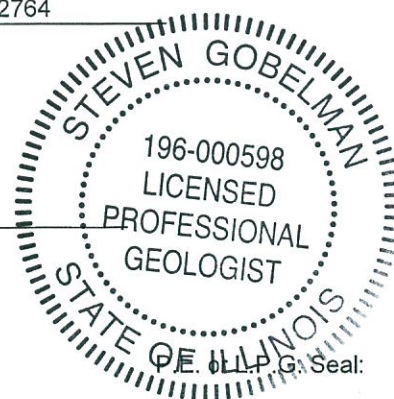
Printed Name:



Licensed Professional Engineer or
Licensed Professional Geologist Signature:

8/23/14

Date:



THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl Acetate
Vinyl Chloride
Xylenes, total
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 2396V-4

Farmstead

Sample ID	2396-2-B02-1	2396-2-B02-2	2396-2-B02-3	1 Most Stringent MAC	2 Outside a Populated Area MAC	3 Populated non-Metropolitan Statistical Area MAC	4 Within Chicago Corporate Limits MAC	5 Metropolitan Statistical Area MAC	6 Class I Soil TCLP/SPLP Comparisons Only
Sample Depth (ft)	0-2.5	2.5-7	7-11.5						
Sample Date	10/23/2013	2/27/2014	2/27/2014						
PID	0	0	0						
Sample pH	7.73	7.98	7.81						
Matrix	Soil	Soil	Soil						
No Contaminants of Concern Noted.									

November 04, 2013

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



RE: IDOT2013-033

WorkOrder: 13101296

Dear Colleen Grey:

TEKLAB, INC received 2 samples on 10/25/2013 9:10:00 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
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101296

Client Project: IDOT2013-033

Report Date: 04-Nov-13

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Client: Andrews Engineering, Inc.

Work Order: 13101296

Client Project: IDOT2013-033

Report Date: 04-Nov-13

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: 13101296

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Cooler Receipt Temp: 2.4 °C

Locations and Accreditations

	<u>Collinsville</u>	<u>Springfield</u>	<u>Kansas City</u>	<u>Collinsville Air</u>
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	3920 Pintail Dr Springfield, IL 62711-9415	8421 Nieman Road Lenexa, KS 66214	5445 Horseshoe Lake Road 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

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



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101296

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101296-002

Client Sample ID: 2396-2-B02

Matrix: SOLID

Collection Date: 10/23/2013 11:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		17.7	%	1	10/25/2013 15:04	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		82.3	%	1	10/25/2013 15:04	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.73		1	10/25/2013 18:51	R183256
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0632	mg/L	1	10/29/2013 15:29	93140
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 15:29	93140
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 15:29	93140
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 15:29	93140
Chromium	NELAP	0.004	0.01	J	0.0046	mg/L	1	10/29/2013 15:29	93140
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 15:29	93140
Iron	NELAP	0.007	0.02		2.61	mg/L	1	10/29/2013 15:29	93140
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 15:29	93140
Manganese	NELAP	0.0016	0.005		0.0121	mg/L	1	10/29/2013 15:29	93140
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	10/29/2013 15:29	93140
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 15:29	93140
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 15:29	93140
Zinc	NELAP	0.0021	0.01		0.014	mg/L	1	10/29/2013 15:29	93140
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	10/30/2013 10:52	93145
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/29/2013 16:36	93145
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 14:07	93153
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/29/2013 23:06	93118
Arsenic	NELAP	1.23	2.45	J	1.57	mg/Kg-dry	1	10/30/2013 13:22	93107
Barium	NELAP	0.25	0.49		168	mg/Kg-dry	1	10/29/2013 11:37	93107
Beryllium	NELAP	0.05	0.1		0.76	mg/Kg-dry	1	10/29/2013 11:37	93107
Boron	NELAP	0.98	1.96		3.46	mg/Kg-dry	1	10/29/2013 11:37	93107
Cadmium	NELAP	0.1	0.2		0.22	mg/Kg-dry	1	10/29/2013 11:37	93107
Calcium	NELAP	2.45	4.9		8820	mg/Kg-dry	1	10/29/2013 11:37	93107
Chromium	NELAP	0.49	0.98	X	21.9	mg/Kg-dry	1	10/29/2013 11:37	93107
Cobalt	NELAP	0.49	0.98		4.89	mg/Kg-dry	1	10/29/2013 11:37	93107
Copper	NELAP	0.49	0.98		16.4	mg/Kg-dry	1	10/29/2013 11:37	93107
Iron	NELAP	0.98	1.96	BX	17400	mg/Kg-dry	1	10/29/2013 11:37	93107
Lead	NELAP	1.96	3.92		14.9	mg/Kg-dry	1	10/29/2013 11:37	93107
Magnesium	NELAP	0.49	0.98	B	4440	mg/Kg-dry	1	10/29/2013 11:37	93107
Manganese	NELAP	0.25	0.49		157	mg/Kg-dry	1	10/29/2013 11:37	93107
Nickel	NELAP	0.49	0.98		13.3	mg/Kg-dry	1	10/29/2013 11:37	93107
Potassium	NELAP	4.9	9.8		965	mg/Kg-dry	1	10/29/2013 11:37	93107
Silver	NELAP	0.49	0.54		< 0.54	mg/Kg-dry	1	10/29/2013 11:37	93107
Sodium	NELAP	2.45	4.9		762	mg/Kg-dry	1	10/29/2013 11:37	93107
Thallium	NELAP	2.45	2.55		< 2.55	mg/Kg-dry	1	10/29/2013 11:37	93107
Vanadium	NELAP	0.49	0.98		26.2	mg/Kg-dry	1	10/29/2013 11:37	93107
Zinc	NELAP	0.49	0.98		70.7	mg/Kg-dry	1	10/29/2013 11:37	93107

Client: Andrews Engineering, Inc.

Work Order: 13101296

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101296-002

Client Sample ID: 2396-2-B02

Matrix: SOLID

Collection Date: 10/23/2013 11:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
<i>Sample results for Fe and Mg exceed 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.35	0.6		< 0.6	mg/Kg-dry	1	10/31/2013 10:43	93116
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.041	mg/Kg-dry	1	10/28/2013 11:38	93083
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.161	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
1,2-Dichlorobenzene	NELAP	0.193	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
1,3-Dichlorobenzene	NELAP	0.204	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
1,4-Dichlorobenzene	NELAP	0.193	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
2,4,5-Trichlorophenol	NELAP	0.115	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
2,4,6-Trichlorophenol	NELAP	0.153	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
2,4-Dichlorophenol	NELAP	0.147	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
2,4-Dimethylphenol	NELAP	0.154	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
2,4-Dinitrophenol	NELAP	0.13	1.21		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
2,4-Dinitrotoluene	NELAP	0.126	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
2,6-Dinitrotoluene	NELAP	0.131	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
2-Chloronaphthalene	NELAP	0.146	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
2-Chlorophenol	NELAP	0.154	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
2-Methylnaphthalene	NELAP	0.144	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
2-Nitroaniline	NELAP	0.11	1.21		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
2-Nitrophenol	NELAP	0.136	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
3,3'-Dichlorobenzidine	NELAP	0.243	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
3-Nitroaniline	NELAP	0.1	1.21		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
4,6-Dinitro-2-methylphenol	NELAP	0.131	1.21		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
4-Bromophenyl phenyl ether	NELAP	0.112	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
4-Chloro-3-methylphenol	NELAP	0.134	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
4-Chloroaniline	NELAP	0.147	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
4-Chlorophenyl phenyl ether	NELAP	0.12	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
4-Nitroaniline	NELAP	0.11	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
4-Nitrophenol	NELAP	0.119	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Acenaphthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Acenaphthylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Benzo(a)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Benzo(a)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Benzo(b)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Benzo(g,h,i)perylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Benzo(k)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Bis(2-chloroethoxy)methane	NELAP	0.142	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Bis(2-chloroethyl)ether	NELAP	0.172	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Bis(2-chloroisopropyl)ether	NELAP	0.138	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Bis(2-ethylhexyl)phthalate	NELAP	0.142	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Butyl benzyl phthalate	NELAP	0.123	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Carbazole		0.148	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Chrysene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101296

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101296-002

Client Sample ID: 2396-2-B02

Matrix: SOLID

Collection Date: 10/23/2013 11:20

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	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Dibenzofuran	NELAP	0.153	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Diethyl phthalate	NELAP	0.117	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Dimethyl phthalate	NELAP	0.11	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Di-n-butyl phthalate	NELAP	0.125	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Di-n-octyl phthalate	NELAP	0.126	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Fluorene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Hexachlorobenzene	NELAP	0.119	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Hexachlorobutadiene	NELAP	0.188	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Hexachlorocyclopentadiene	NELAP	0.124	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Hexachloroethane	NELAP	0.203	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Isophorone	NELAP	0.143	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
m,p-Cresol	NELAP	0.153	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Naphthalene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Nitrobenzene	NELAP	0.152	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
N-Nitroso-di-n-propylamine	NELAP	0.134	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
N-Nitrosodiphenylamine	NELAP	0.112	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
o-Cresol	NELAP	0.143	0.607		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Pentachlorophenol	NELAP	0.801	2.43		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Phenanthrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Phenol	NELAP	0.141	0.425		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 9:07	93178
Surr: 2,4,6-Tribromophenol		0	32.7-130		73.6	%REC	1	11/02/2013 9:07	93178
Surr: 2-Fluorobiphenyl		0	34.1-116		70.9	%REC	1	11/02/2013 9:07	93178
Surr: 2-Fluorophenol		0	30.5-99		67.3	%REC	1	11/02/2013 9:07	93178
Surr: Nitrobenzene-d5		0	34.1-101		67.5	%REC	1	11/02/2013 9:07	93178
Surr: Phenol-d5		0	34.9-110		75.2	%REC	1	11/02/2013 9:07	93178
Surr: p-Terphenyl-d14		0	41.7-124		80.5	%REC	1	11/02/2013 9:07	93178
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
1,1,1,2,2-Tetrachloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
1,1,2-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
1,1-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
1,1-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
1,2-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
1,2-Dichloropropane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
1,3-Dichloropropene, Total		0.0009	0.003		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
2-Butanone	NELAP	0.0086	0.043	J	0.016	mg/Kg-dry	1	10/26/2013 7:22	93122
2-Hexanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
4-Methyl-2-pentanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Acetone	NELAP	0.0086	0.043		0.137	mg/Kg-dry	1	10/26/2013 7:22	93122
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Bromodichloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Bromoform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Bromomethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/26/2013 7:22	93122



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101296

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101296-002

Client Sample ID: 2396-2-B02

Matrix: SOLID

Collection Date: 10/23/2013 11:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbon disulfide	NELAP	0.0026	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Carbon tetrachloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Chlorobenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Chloroethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Chloroform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Chloromethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
cis-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
cis-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Dibromochloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Ethylbenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
m,p-Xylenes	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Methylene chloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
o-Xylene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Styrene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Tetrachloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Toluene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
trans-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
trans-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Trichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Vinyl acetate	NELAP	0.0172	0.043		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Xylenes, Total	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/26/2013 7:22	93122
Surr: 1,2-Dichloroethane-d4		0	72.2-131		113.3	%REC	1	10/26/2013 7:22	93122
Surr: 4-Bromofluorobenzene		0	82.1-116		107.2	%REC	1	10/26/2013 7:22	93122
Surr: Dibromofluoromethane		0	77.7-120		106.7	%REC	1	10/26/2013 7:22	93122
Surr: Toluene-d8		0	86-116		91.2	%REC	1	10/26/2013 7:22	93122

March 07, 2014

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



RE: IDOT2013-033

WorkOrder: 14021325

Dear Colleen Grey:

TEKLAB, INC received 4 samples on 2/28/2014 8:46:00 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
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021325

Client Project: IDOT2013-033

Report Date: 07-Mar-14

This reporting package includes the following:

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Laboratory Results	5
Quality Control Results	21
Receiving Check List	48
Chain of Custody	Appended

Client: Andrews Engineering, Inc.

Work Order: 14021325

Client Project: IDOT2013-033

Report Date: 07-Mar-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: 14021325

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Cooler Receipt Temp: 1.4 °C

Locations and Accreditations

	<u>Collinsville</u>	<u>Springfield</u>	<u>Kansas City</u>	<u>Collinsville Air</u>
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	3920 Pintail Dr Springfield, IL 62711-9415	8421 Nieman Road Lenexa, KS 66214	5445 Horseshoe Lake Road 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

<u>State</u>	<u>Dept</u>	<u>Cert #</u>	<u>NELAP</u>	<u>Exp Date</u>	<u>Lab</u>
Illinois	IEPA	100226	NELAP	1/31/2015	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2014	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2014	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2014	Springfield
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2014	Collinsville
Arkansas	ADEQ	88-0966		3/14/2014	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: 14021325

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021325-003

Client Sample ID: 2396-2-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 15:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		22.2	%	1	03/03/2014 12:52	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		77.8	%	1	03/03/2014 12:52	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.98		1	03/03/2014 18:38	R187768
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0617	mg/L	1	03/04/2014 17:39	96534
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 17:39	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 17:39	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 17:39	96534
Chromium	NELAP	0.004	0.01	J	0.0045	mg/L	1	03/04/2014 17:39	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 17:39	96534
Iron	NELAP	0.007	0.1		2.79	mg/L	1	03/04/2014 17:39	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 17:39	96534
Manganese	NELAP	0.0016	0.005		0.0178	mg/L	1	03/04/2014 17:39	96534
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	03/04/2014 17:39	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 17:39	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 17:39	96534
Zinc	NELAP	0.0021	0.01		0.0162	mg/L	1	03/04/2014 17:39	96534
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	03/04/2014 8:40	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 17:07	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 13:22	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.55	4.9		< 4.9	mg/Kg-dry	1	03/04/2014 18:27	96508
Arsenic	NELAP	1.16	2.31		4.81	mg/Kg-dry	1	03/03/2014 16:47	96481
Barium	NELAP	0.23	0.46		168	mg/Kg-dry	1	03/03/2014 16:47	96481
Beryllium	NELAP	0.05	0.09		0.76	mg/Kg-dry	1	03/03/2014 16:47	96481
Boron	NELAP	0.93	1.85		2.62	mg/Kg-dry	1	03/03/2014 16:47	96481
Cadmium	NELAP	0.09	0.19		0.22	mg/Kg-dry	1	03/03/2014 16:47	96481
Calcium	NELAP	2.31	4.63		6660	mg/Kg-dry	1	03/03/2014 16:47	96481
Chromium	NELAP	0.46	0.93	X	20.5	mg/Kg-dry	1	03/03/2014 16:47	96481
Cobalt	NELAP	0.46	0.93		7.17	mg/Kg-dry	1	03/03/2014 16:47	96481
Copper	NELAP	0.46	0.93		19.4	mg/Kg-dry	1	03/03/2014 16:47	96481
Iron	NELAP	0.93	1.85	X	19700	mg/Kg-dry	1	03/03/2014 16:47	96481
Lead	NELAP	1.85	3.7		15.5	mg/Kg-dry	1	03/03/2014 16:47	96481
Magnesium	NELAP	0.46	0.93		3520	mg/Kg-dry	1	03/03/2014 16:47	96481
Manganese	NELAP	0.23	0.46		496	mg/Kg-dry	1	03/03/2014 16:47	96481
Nickel	NELAP	0.46	0.93		16.4	mg/Kg-dry	1	03/03/2014 16:47	96481
Potassium	NELAP	4.63	9.26		1040	mg/Kg-dry	1	03/03/2014 16:47	96481
Silver	NELAP	0.46	0.51		< 0.51	mg/Kg-dry	1	03/03/2014 16:47	96481
Sodium	NELAP	2.31	4.63		507	mg/Kg-dry	1	03/03/2014 16:47	96481
Thallium	NELAP	2.31	2.41		< 2.41	mg/Kg-dry	1	03/03/2014 16:47	96481
Vanadium	NELAP	0.46	0.93		30	mg/Kg-dry	1	03/03/2014 16:47	96481
Zinc	NELAP	0.46	0.93	B	66.4	mg/Kg-dry	1	03/03/2014 16:47	96481

Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021325

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021325-003

Client Sample ID: 2396-2-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 15:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.324	0.556		< 0.556	mg/Kg-dry	1	03/03/2014 9:36	96485
SW-846 7471B									
Mercury	NELAP	0.003	0.013		0.046	mg/Kg-dry	1	03/03/2014 14:25	96522
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.17	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
1,2-Dichlorobenzene	NELAP	0.204	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
1,3-Dichlorobenzene	NELAP	0.215	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
1,4-Dichlorobenzene	NELAP	0.204	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
2,4,5-Trichlorophenol	NELAP	0.122	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
2,4,6-Trichlorophenol	NELAP	0.161	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
2,4-Dichlorophenol	NELAP	0.155	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
2,4-Dimethylphenol	NELAP	0.163	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
2,4-Dinitrophenol	NELAP	0.137	1.28		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
2,4-Dinitrotoluene	NELAP	0.133	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
2,6-Dinitrotoluene	NELAP	0.138	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
2-Chloronaphthalene	NELAP	0.154	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
2-Chlorophenol	NELAP	0.163	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
2-Methylnaphthalene	NELAP	0.152	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
2-Nitroaniline	NELAP	0.117	1.28		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
2-Nitrophenol	NELAP	0.143	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
3,3'-Dichlorobenzidine	NELAP	0.256	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
3-Nitroaniline	NELAP	0.105	1.28		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
4,6-Dinitro-2-methylphenol	NELAP	0.138	1.28		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
4-Bromophenyl phenyl ether	NELAP	0.118	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
4-Chloro-3-methylphenol	NELAP	0.141	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
4-Chloroaniline	NELAP	0.155	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
4-Chlorophenyl phenyl ether	NELAP	0.127	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
4-Nitroaniline	NELAP	0.117	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
4-Nitrophenol	NELAP	0.126	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Acenaphthene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Acenaphthylene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Anthracene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Benzo(a)anthracene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Benzo(a)pyrene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Benzo(b)fluoranthene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Benzo(g,h,i)perylene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Benzo(k)fluoranthene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Bis(2-chloroethoxy)methane	NELAP	0.15	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Bis(2-chloroethyl)ether	NELAP	0.182	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Bis(2-chloroisopropyl)ether	NELAP	0.146	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Bis(2-ethylhexyl)phthalate	NELAP	0.15	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Butyl benzyl phthalate	NELAP	0.129	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Carbazole		0.156	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Chrysene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Dibenzo(a,h)anthracene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Dibenzofuran	NELAP	0.161	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Diethyl phthalate	NELAP	0.123	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442

Client: Andrews Engineering, Inc.

Work Order: 14021325

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021325-003

Client Sample ID: 2396-2-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 15:50

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	0.117	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Di-n-butyl phthalate	NELAP	0.132	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Di-n-octyl phthalate	NELAP	0.133	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Fluoranthene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Fluorene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Hexachlorobenzene	NELAP	0.126	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Hexachlorobutadiene	NELAP	0.199	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Hexachlorocyclopentadiene	NELAP	0.131	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Hexachloroethane	NELAP	0.214	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Indeno(1,2,3-cd)pyrene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Isophorone	NELAP	0.151	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
m,p-Cresol	NELAP	0.161	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Naphthalene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Nitrobenzene	NELAP	0.16	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
N-Nitroso-di-n-propylamine	NELAP	0.141	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
N-Nitrosodiphenylamine	NELAP	0.118	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
o-Cresol	NELAP	0.151	0.64		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Pentachlorophenol	NELAP	0.845	2.56		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Phenanthrene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Phenol	NELAP	0.149	0.448		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Pyrene	NELAP	0.021	0.044		ND	mg/Kg-dry	1	03/01/2014 1:48	96442
Surr: 2,4,6-Tribromophenol		0	46-125		78.5	%REC	1	03/01/2014 1:48	96442
Surr: 2-Fluorobiphenyl		0	49.6-91.4		65.7	%REC	1	03/01/2014 1:48	96442
Surr: 2-Fluorophenol		0	51.4-93.1		60.9	%REC	1	03/01/2014 1:48	96442
Surr: Nitrobenzene-d5		0	32.8-110		50.4	%REC	1	03/01/2014 1:48	96442
Surr: Phenol-d5		0	57.2-100		81.7	%REC	1	03/01/2014 1:48	96442
Surr: p-Terphenyl-d14		0	61.8-117		75.8	%REC	1	03/01/2014 1:48	96442
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
1,1,1,2-Tetrachloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
1,1,2-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
1,1-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
1,1-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
1,2-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
1,2-Dichloropropane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
1,3-Dichloropropene, Total		0.001	0.004		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
2-Butanone	NELAP	0.0103	0.051	J	0.02	mg/Kg-dry	1	02/28/2014 11:47	96521
2-Hexanone	NELAP	0.0103	0.051		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
4-Methyl-2-pentanone	NELAP	0.0103	0.051		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Acetone	NELAP	0.0103	0.051		0.087	mg/Kg-dry	1	02/28/2014 11:47	96521
Benzene	NELAP	0.0005	0.001		0.002	mg/Kg-dry	1	02/28/2014 11:47	96521
Bromodichloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Bromoform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Bromomethane	NELAP	0.0021	0.01		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Carbon disulfide	NELAP	0.0031	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Carbon tetrachloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Chlorobenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021325

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021325-003

Client Sample ID: 2396-2-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 15:50

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	02/28/2014 11:47	96521
Chloroform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Chloromethane	NELAP	0.0021	0.01		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
cis-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
cis-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Dibromochloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Ethylbenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
m,p-Xylenes	NELAP	0.001	0.005	J	0.001	mg/Kg-dry	1	02/28/2014 11:47	96521
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Methylene chloride	NELAP	0.001	0.005	J	0.002	mg/Kg-dry	1	02/28/2014 11:47	96521
o-Xylene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Styrene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Tetrachloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Toluene	NELAP	0.001	0.005	J	0.003	mg/Kg-dry	1	02/28/2014 11:47	96521
trans-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
trans-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Trichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Vinyl acetate	NELAP	0.0205	0.051		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	02/28/2014 11:47	96521
Xylenes, Total	NELAP	0.001	0.005	J	0.001	mg/Kg-dry	1	02/28/2014 11:47	96521
Surr: 1,2-Dichloroethane-d4		0	72.2-131		109.2	%REC	1	02/28/2014 11:47	96521
Surr: 4-Bromofluorobenzene		0	82.1-116		103.5	%REC	1	02/28/2014 11:47	96521
Surr: Dibromofluoromethane		0	77.7-120		103.1	%REC	1	02/28/2014 11:47	96521
Surr: Toluene-d8		0	86-116		97.1	%REC	1	02/28/2014 11:47	96521



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021325

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021325-004

Client Sample ID: 2396-2-B02-3

Matrix: SOLID

Collection Date: 02/27/2014 16:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		23.9	%	1	03/03/2014 12:52	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		76.1	%	1	03/03/2014 12:52	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.81		1	03/03/2014 18:44	R187768
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0292	mg/L	1	03/04/2014 17:43	96534
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 17:43	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 17:43	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 17:43	96534
Chromium	NELAP	0.004	0.01		< 0.01	mg/L	1	03/04/2014 17:43	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 17:43	96534
Iron	NELAP	0.007	0.1		1.91	mg/L	1	03/04/2014 17:43	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 17:43	96534
Manganese	NELAP	0.0016	0.005		0.0074	mg/L	1	03/04/2014 17:43	96534
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	03/04/2014 17:43	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 17:43	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 17:43	96534
Zinc	NELAP	0.0021	0.01		0.0108	mg/L	1	03/04/2014 17:43	96534
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	03/04/2014 8:44	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 17:10	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 13:29	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	03/04/2014 18:33	96508
Arsenic	NELAP	1.18	2.36	J	1.41	mg/Kg-dry	1	03/03/2014 16:54	96481
Barium	NELAP	0.24	0.47		80.2	mg/Kg-dry	1	03/03/2014 16:54	96481
Beryllium	NELAP	0.05	0.09		0.68	mg/Kg-dry	1	03/03/2014 16:54	96481
Boron	NELAP	0.94	1.89		3.6	mg/Kg-dry	1	03/03/2014 16:54	96481
Cadmium	NELAP	0.09	0.19	J	0.13	mg/Kg-dry	1	03/03/2014 16:54	96481
Calcium	NELAP	2.36	4.72		4560	mg/Kg-dry	1	03/03/2014 16:54	96481
Chromium	NELAP	0.47	0.94	X	22	mg/Kg-dry	1	03/03/2014 16:54	96481
Cobalt	NELAP	0.47	0.94		5.67	mg/Kg-dry	1	03/03/2014 16:54	96481
Copper	NELAP	0.47	0.94		11.8	mg/Kg-dry	1	03/03/2014 16:54	96481
Iron	NELAP	0.94	1.89	X	19800	mg/Kg-dry	1	03/03/2014 16:54	96481
Lead	NELAP	1.89	3.77		13	mg/Kg-dry	1	03/03/2014 16:54	96481
Magnesium	NELAP	0.47	0.94		4400	mg/Kg-dry	1	03/03/2014 16:54	96481
Manganese	NELAP	0.24	0.47		85.1	mg/Kg-dry	1	03/03/2014 16:54	96481
Nickel	NELAP	0.47	0.94		14.5	mg/Kg-dry	1	03/03/2014 16:54	96481
Potassium	NELAP	4.72	9.43		1490	mg/Kg-dry	1	03/03/2014 16:54	96481
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	03/03/2014 16:54	96481
Sodium	NELAP	2.36	4.72		72.5	mg/Kg-dry	1	03/03/2014 16:54	96481
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	03/03/2014 16:54	96481
Vanadium	NELAP	0.47	0.94		36.3	mg/Kg-dry	1	03/03/2014 16:54	96481
Zinc	NELAP	0.47	0.94	B	59	mg/Kg-dry	1	03/03/2014 16:54	96481

Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).

Client: Andrews Engineering, Inc.

Work Order: 14021325

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021325-004

Client Sample ID: 2396-2-B02-3

Matrix: SOLID

Collection Date: 02/27/2014 16:10

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	03/03/2014 9:39	96485
SW-846 7471B									
Mercury	NELAP	0.003	0.013		0.033	mg/Kg-dry	1	03/03/2014 14:27	96522
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.174	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
1,2-Dichlorobenzene	NELAP	0.208	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
1,3-Dichlorobenzene	NELAP	0.219	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
1,4-Dichlorobenzene	NELAP	0.208	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
2,4,5-Trichlorophenol	NELAP	0.124	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
2,4,6-Trichlorophenol	NELAP	0.165	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
2,4-Dichlorophenol	NELAP	0.158	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
2,4-Dimethylphenol	NELAP	0.166	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
2,4-Dinitrophenol	NELAP	0.14	1.31		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
2,4-Dinitrotoluene	NELAP	0.136	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
2,6-Dinitrotoluene	NELAP	0.141	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
2-Chloronaphthalene	NELAP	0.157	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
2-Chlorophenol	NELAP	0.166	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
2-Methylnaphthalene	NELAP	0.155	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
2-Nitroaniline	NELAP	0.119	1.31		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
2-Nitrophenol	NELAP	0.146	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
3,3'-Dichlorobenzidine	NELAP	0.261	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
3-Nitroaniline	NELAP	0.107	1.31		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
4,6-Dinitro-2-methylphenol	NELAP	0.141	1.31		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
4-Bromophenyl phenyl ether	NELAP	0.12	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
4-Chloro-3-methylphenol	NELAP	0.144	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
4-Chloroaniline	NELAP	0.158	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
4-Chlorophenyl phenyl ether	NELAP	0.129	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
4-Nitroaniline	NELAP	0.119	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
4-Nitrophenol	NELAP	0.128	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Acenaphthene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Acenaphthylene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Anthracene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Benzo(a)anthracene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Benzo(a)pyrene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Benzo(b)fluoranthene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Benzo(g,h,i)perylene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Benzo(k)fluoranthene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Bis(2-chloroethoxy)methane	NELAP	0.153	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Bis(2-chloroethyl)ether	NELAP	0.185	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Bis(2-chloroisopropyl)ether	NELAP	0.149	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Bis(2-ethylhexyl)phthalate	NELAP	0.153	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Butyl benzyl phthalate	NELAP	0.132	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Carbazole		0.159	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Chrysene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Dibenzo(a,h)anthracene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Dibenzofuran	NELAP	0.165	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Diethyl phthalate	NELAP	0.125	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442

Client: Andrews Engineering, Inc.

Work Order: 14021325

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021325-004

Client Sample ID: 2396-2-B02-3

Matrix: SOLID

Collection Date: 02/27/2014 16:10

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	0.119	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Di-n-butyl phthalate	NELAP	0.135	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Di-n-octyl phthalate	NELAP	0.136	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Fluoranthene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Fluorene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Hexachlorobenzene	NELAP	0.128	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Hexachlorobutadiene	NELAP	0.202	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Hexachlorocyclopentadiene	NELAP	0.133	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Hexachloroethane	NELAP	0.218	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Indeno(1,2,3-cd)pyrene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Isophorone	NELAP	0.154	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
m,p-Cresol	NELAP	0.165	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Naphthalene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Nitrobenzene	NELAP	0.163	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
N-Nitroso-di-n-propylamine	NELAP	0.144	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
N-Nitrosodiphenylamine	NELAP	0.12	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
o-Cresol	NELAP	0.154	0.653		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Pentachlorophenol	NELAP	0.862	2.61		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Phenanthrene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Phenol	NELAP	0.151	0.457		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Pyrene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	03/01/2014 2:22	96442
Surr: 2,4,6-Tribromophenol		0	46-125		81.8	%REC	1	03/01/2014 2:22	96442
Surr: 2-Fluorobiphenyl		0	49.6-91.4		78.5	%REC	1	03/01/2014 2:22	96442
Surr: 2-Fluorophenol		0	51.4-93.1		52.8	%REC	1	03/01/2014 2:22	96442
Surr: Nitrobenzene-d5		0	32.8-110		49.7	%REC	1	03/01/2014 2:22	96442
Surr: Phenol-d5		0	57.2-100		66.6	%REC	1	03/01/2014 2:22	96442
Surr: p-Terphenyl-d14		0	61.8-117		103.6	%REC	1	03/01/2014 2:22	96442
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
1,1,2,2-Tetrachloroethane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
1,1,2-Trichloroethane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
1,1-Dichloroethane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
1,1-Dichloroethene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
1,2-Dichloroethane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
1,2-Dichloropropane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
1,3-Dichloropropene, Total		0.0011	0.004		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
2-Butanone	NELAP	0.0107	0.053		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
2-Hexanone	NELAP	0.0107	0.053		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
4-Methyl-2-pentanone	NELAP	0.0107	0.053		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Acetone	NELAP	0.0107	0.053	J	0.019	mg/Kg-dry	1	02/28/2014 12:13	96521
Benzene	NELAP	0.0005	0.001		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Bromodichloromethane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Bromoform	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Bromomethane	NELAP	0.0021	0.011		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Carbon disulfide	NELAP	0.0032	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Carbon tetrachloride	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Chlorobenzene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021325

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021325-004

Client Sample ID: 2396-2-B02-3

Matrix: SOLID

Collection Date: 02/27/2014 16:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0021	0.011		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Chloroform	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Chloromethane	NELAP	0.0021	0.011		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
cis-1,2-Dichloroethene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
cis-1,3-Dichloropropene	NELAP	0.0011	0.004		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Dibromochloromethane	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Ethylbenzene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
m,p-Xylenes	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Methylene chloride	NELAP	0.0011	0.005	J	0.001	mg/Kg-dry	1	02/28/2014 12:13	96521
o-Xylene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Styrene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Tetrachloroethene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Toluene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
trans-1,2-Dichloroethene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
trans-1,3-Dichloropropene	NELAP	0.0011	0.004		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Trichloroethene	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Vinyl acetate	NELAP	0.0213	0.053		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Xylenes, Total	NELAP	0.0011	0.005		ND	mg/Kg-dry	1	02/28/2014 12:13	96521
Surr: 1,2-Dichloroethane-d4		0	72.2-131		110.2	%REC	1	02/28/2014 12:13	96521
Surr: 4-Bromofluorobenzene		0	82.1-116		102.6	%REC	1	02/28/2014 12:13	96521
Surr: Dibromofluoromethane		0	77.7-120		103	%REC	1	02/28/2014 12:13	96521
Surr: Toluene-d8		0	86-116		96.5	%REC	1	02/28/2014 12:13	96521



CHAIN OF CUSTODY RECORD

Client Contact Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	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: US Rt. 20 Kane Co Project No.: 11072013-033 TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: T/CRM	COC No.: 1 of 1 Lab Job No.: 14021325 Sample Temp: 1.4													
Special Instructions: See Table 2 for complete parameter lists and minimum reporting limits. * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal. ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.		Matrix Key: W: Water S: Soil SL: Sludge S: Sediment L: Leachate DW: Drinking Water OL: Oil O: Other														
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
14021325-701	2396-2-B01-2	2/27	3:30	S	X	X					X	X	X	X		2.5-7
702	2396-2-B01-3		3:40	S	X	X					X	X	X	X		7-11.5
703	2396-2-B02-2		3:50	S	X	X					X	X	X	X		2.5-7
704	2396-2-B02-3		4:10	S	X	X					X	X	X	X		7-11.5
Relinquished by: <i>[Signature]</i>					Date/Time: 2/28	Received by: <i>Stephanie Haynes</i>					Date/Time: 2/28/14 8:46					
Relinquished by:					Date/Time:	Received by:					Date/Time:					
Relinquished by:					Date/Time:	Received by:					Date/Time:					



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: FAP 525 (US Route 20) Office Phone Number, if available: _____

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

16N300 to 16N600 block of US 20

City: Hampshire & Unincorp State: IL Zip Code: 60140

County: Kane Township: Hampshire

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

Latitude: 42.10143 Longitude: -88.48136
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

- GPS Map Interpolation Photo Interpolation Survey Other

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

II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: _____

PO Box: _____

City: Schaumburg State: IL

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4101

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: FAP 525 (US Route 20)

Latitude: 42.10143 Longitude: -88.48136

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

LOCATIONS 2396-4-B01 THROUGH 2396-4-B09 WERE SAMPLED ADJACENT TO ISGS SITE 2396V-5. SEE FIGURES 2 AND 3, AND TABLE 3d OF THE REVISED PRELIMINARY SITE INVESTIGATION.

- 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 ANALYTICAL REPORT - WORK ORDER NUMBERS: 13101213 and 14021326

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

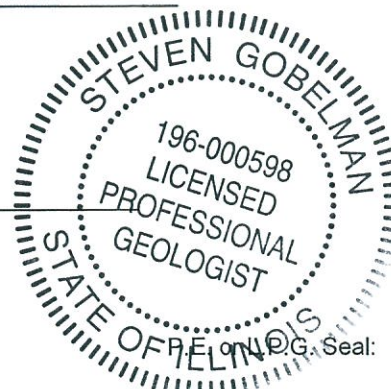
Steven Gobelman

Printed Name:


 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

8/23/14

Date:



THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl Acetate
Vinyl Chloride
Xylenes, total
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 2396V-5
Agricultural Land**

Sample ID	2396-4-B01-1	2396-4-B01-2	2396-4-B02-1	2396-4-B02-2	2396-4-B03-1	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)	0-4	4-9	0-4	4-9	0-4						
Sample Date	10/22/2013	2/27/2014	10/22/2013	2/27/2014	10/22/2013						
PID	0	0	0	0	0						
Sample pH	8.08	8.6	8.08	8.84	7.9						
Matrix	Soil	Soil	Soil	Soil	Soil						
Inorganic Compounds, Total (mg/kg)											
Arsenic	7.41	5.43	6.08	4.38	9.86	11.3	NA	11.3	NA	13	NA

Sample ID	2396-4-B03-2	2396-4-B03-2 DUP	2396-4-B04-1	2396-4-B04-2	2396-4-B05-1	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)	4-9	4-9	0-4	4-9	0-4						
Sample Date	2/27/2014	2/27/2014	10/22/2013	2/27/2014	10/22/2013						
PID	0	0	0	0	0						
Sample pH	8.46	8.03	7.8	8.43	8.47						
Matrix	Soil	Soil	Soil	Soil	Soil						
Inorganic Compounds, Total (mg/kg)											
Arsenic	4.3	4.78	3.96	5.17	J 1.41	11.3	NA	11.3	NA	13	NA

Sample ID	2396-4-B05-1 DUP	2396-4-B05-2	2396-4-B06-1	2396-4-B06-2	2396-4-B07-1	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)	0-4	4-9	0-4	4-9	0-4							
Sample Date	10/22/2013	2/27/2014	10/22/2013	2/27/2014	10/22/2013							
PID	0	0	0	0	0							
Sample pH	8.56	8.47	7.95	7.59	7.66							
Matrix	Soil	Soil	Soil	Soil	Soil							
Inorganic Compounds, Total (mg/kg)												
Arsenic	2.69	J 2.3	11.2	11.4	1.3	4.83	11.3	NA	11.3	NA	13	NA

Sample ID	2396-4-B07-2	2396-4-B08-1	2396-4-B08-2	2396-4-B09-1	2396-4-B09-2	1 Most Stringent MAC	2 Outside a Populated Area MAC	3 Populated non-Metropolitan Statistical Area MAC	4 Within Chicago Corporate Limits MAC	5 Metropolitan Statistical Area MAC	6 Class I Soil TCLP/SPLP Comparisons Only
Sample Depth (ft)	4-9	0-4	4-9	0-4	4-9						
Sample Date	2/27/2014	10/22/2013	2/27/2014	10/22/2013	2/27/2014						
PID	0	0	0	0	0						
Sample pH	8.35	7.65	8.42	7.8	8.35						
Matrix	Soil	Soil	Soil	Soil	Soil						
Inorganic Compounds, Total (mg/kg)											
Arsenic	2.65	8.58	4.8	7.88	4.34	11.3	NA	11.3	NA	13	NA

November 01, 2013

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



RE: IDOT2013-033

WorkOrder: 13101213

Dear Colleen Grey:

TEKLAB, INC received 10 samples on 10/24/2013 8:05:00 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
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

This reporting package includes the following:

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Report Contents	2
Definitions	3
Case Narrative	4
Laboratory Results	5
Quality Control Results	45
Receiving Check List	77
Chain of Custody	Appended

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

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: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Cooler Receipt Temp: 2.4 °C

Locations and Accreditations

	<u>Collinsville</u>	<u>Springfield</u>	<u>Kansas City</u>	<u>Collinsville Air</u>
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	3920 Pintail Dr Springfield, IL 62711-9415	8421 Nieman Road Lenexa, KS 66214	5445 Horseshoe Lake Road 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

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

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-001

Client Sample ID: 2396-4-B01

Matrix: SOLID

Collection Date: 10/22/2013 12:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		16.3	%	1	10/24/2013 15:29	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		83.7	%	1	10/24/2013 15:29	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.08		1	10/24/2013 19:47	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 9:11	93226
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/31/2013 9:11	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.128	mg/L	1	10/28/2013 16:13	93085
Beryllium	NELAP	0.0003	0.001	J	0.0005	mg/L	1	10/28/2013 16:13	93085
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 16:13	93085
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 16:13	93085
Chromium	NELAP	0.004	0.01		0.0225	mg/L	1	10/28/2013 16:13	93085
Cobalt	NELAP	0.0022	0.01	J	0.0035	mg/L	1	10/28/2013 16:13	93085
Iron	NELAP	0.007	0.02	X	19.3	mg/L	1	10/28/2013 16:13	93085
Lead	NELAP	0.006	0.007	X	0.0107	mg/L	1	10/28/2013 16:13	93085
Manganese	NELAP	0.0016	0.005		0.112	mg/L	1	10/28/2013 16:13	93085
Nickel	NELAP	0.0033	0.01		0.0195	mg/L	1	10/28/2013 16:13	93085
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 16:13	93085
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 16:13	93085
Zinc	NELAP	0.0021	0.01		0.0459	mg/L	1	10/28/2013 16:13	93085
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	10/29/2013 21:07	93087
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 10:26	93087
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 12:35	93092
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.41	4.63		< 4.63	mg/Kg-dry	1	10/28/2013 21:32	93063
Arsenic	NELAP	1.16	2.31		7.41	mg/Kg-dry	1	10/25/2013 16:17	93041
Barium	NELAP	0.23	0.46		98.7	mg/Kg-dry	1	10/25/2013 16:17	93041
Beryllium	NELAP	0.05	0.09		0.81	mg/Kg-dry	1	10/25/2013 16:17	93041
Boron	NELAP	0.93	1.85		10.3	mg/Kg-dry	1	10/25/2013 16:17	93041
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	10/25/2013 16:17	93041
Calcium	NELAP	2.31	4.63		12500	mg/Kg-dry	1	10/25/2013 16:17	93041
Chromium	NELAP	0.46	0.93	X	23.6	mg/Kg-dry	1	10/25/2013 16:17	93041
Cobalt	NELAP	0.46	0.93		8.31	mg/Kg-dry	1	10/25/2013 16:17	93041
Copper	NELAP	0.46	0.93		23.4	mg/Kg-dry	1	10/25/2013 16:17	93041
Iron	NELAP	0.93	1.85	BX	24300	mg/Kg-dry	1	10/25/2013 16:17	93041
Lead	NELAP	1.85	3.7		43.4	mg/Kg-dry	1	10/25/2013 16:17	93041
Magnesium	NELAP	0.46	0.93		8660	mg/Kg-dry	1	10/25/2013 16:17	93041
Manganese	NELAP	0.23	0.46		561	mg/Kg-dry	1	10/25/2013 16:17	93041
Nickel	NELAP	0.46	0.93		26.4	mg/Kg-dry	1	10/25/2013 16:17	93041
Potassium	NELAP	4.63	9.26		2140	mg/Kg-dry	1	10/25/2013 16:17	93041
Silver	NELAP	0.46	0.51		< 0.51	mg/Kg-dry	1	10/28/2013 16:04	93041
Sodium	NELAP	2.31	4.63		1540	mg/Kg-dry	1	10/25/2013 16:17	93041

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-001

Client Sample ID: 2396-4-B01

Matrix: SOLID

Collection Date: 10/22/2013 12:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Thallium	NELAP	2.31	2.41		< 2.41	mg/Kg-dry	1	10/25/2013 16:17	93041
Vanadium	NELAP	0.46	0.93		34.5	mg/Kg-dry	1	10/25/2013 16:17	93041
Zinc	NELAP	0.46	0.93		60.6	mg/Kg-dry	1	10/25/2013 16:17	93041
<i>Sample result for Fe exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588		< 0.588	mg/Kg-dry	1	10/28/2013 14:01	93057
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.029	mg/Kg-dry	1	10/25/2013 11:21	93029
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.161	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
1,2-Dichlorobenzene	NELAP	0.193	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
1,3-Dichlorobenzene	NELAP	0.204	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
1,4-Dichlorobenzene	NELAP	0.193	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
2,4,5-Trichlorophenol	NELAP	0.115	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
2,4,6-Trichlorophenol	NELAP	0.153	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
2,4-Dichlorophenol	NELAP	0.147	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
2,4-Dimethylphenol	NELAP	0.154	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
2,4-Dinitrophenol	NELAP	0.13	1.21		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
2,4-Dinitrotoluene	NELAP	0.126	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
2,6-Dinitrotoluene	NELAP	0.131	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
2-Chloronaphthalene	NELAP	0.146	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
2-Chlorophenol	NELAP	0.154	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
2-Methylnaphthalene	NELAP	0.144	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
2-Nitroaniline	NELAP	0.11	1.21		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
2-Nitrophenol	NELAP	0.136	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
3,3'-Dichlorobenzidine	NELAP	0.243	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
3-Nitroaniline	NELAP	0.099	1.21		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
4,6-Dinitro-2-methylphenol	NELAP	0.131	1.21		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
4-Bromophenyl phenyl ether	NELAP	0.112	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
4-Chloro-3-methylphenol	NELAP	0.133	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
4-Chloroaniline	NELAP	0.147	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
4-Chlorophenyl phenyl ether	NELAP	0.12	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
4-Nitroaniline	NELAP	0.11	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
4-Nitrophenol	NELAP	0.119	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Acenaphthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Acenaphthylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Benzo(a)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Benzo(a)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/28/2013 22:43	93033
Benzo(b)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/28/2013 22:43	93033
Benzo(g,h,i)perylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/28/2013 22:43	93033
Benzo(k)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/28/2013 22:43	93033
Bis(2-chloroethoxy)methane	NELAP	0.142	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Bis(2-chloroethyl)ether	NELAP	0.172	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Bis(2-chloroisopropyl)ether	NELAP	0.138	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Bis(2-ethylhexyl)phthalate	NELAP	0.142	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Butyl benzyl phthalate	NELAP	0.122	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033

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Lab ID: 13101213-001

Client Sample ID: 2396-4-B01

Matrix: SOLID

Collection Date: 10/22/2013 12:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbazole		0.148	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Chrysene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Dibenzo(a,h)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/28/2013 22:43	93033
Dibenzofuran	NELAP	0.153	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Diethyl phthalate	NELAP	0.116	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Dimethyl phthalate	NELAP	0.11	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Di-n-butyl phthalate	NELAP	0.125	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Di-n-octyl phthalate	NELAP	0.126	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Fluorene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Hexachlorobenzene	NELAP	0.119	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Hexachlorobutadiene	NELAP	0.188	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Hexachlorocyclopentadiene	NELAP	0.124	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Hexachloroethane	NELAP	0.203	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/28/2013 22:43	93033
Isophorone	NELAP	0.143	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
m,p-Cresol	NELAP	0.153	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Naphthalene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Nitrobenzene	NELAP	0.152	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
N-Nitroso-di-n-propylamine	NELAP	0.133	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
N-Nitrosodiphenylamine	NELAP	0.112	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
o-Cresol	NELAP	0.143	0.606		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Pentachlorophenol	NELAP	0.8	2.43		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Phenanthrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Phenol	NELAP	0.141	0.424		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 20:38	93033
Surr: 2,4,6-Tribromophenol		0	32.7-130		97.6	%REC	1	10/27/2013 20:38	93033
Surr: 2-Fluorobiphenyl		0	34.1-116		84.7	%REC	1	10/27/2013 20:38	93033
Surr: 2-Fluorophenol		0	30.5-99		77.7	%REC	1	10/27/2013 20:38	93033
Surr: Nitrobenzene-d5		0	34.1-101		88.2	%REC	1	10/27/2013 20:38	93033
Surr: Phenol-d5		0	34.9-110		85	%REC	1	10/27/2013 20:38	93033
Surr: p-Terphenyl-d14		0	41.7-124		89.9	%REC	1	10/27/2013 20:38	93033
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
1,1,2,2-Tetrachloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
1,1,2-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
1,1-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
1,1-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
1,2-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
1,2-Dichloropropane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
1,3-Dichloropropene, Total		0.0009	0.003		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
2-Butanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
2-Hexanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
4-Methyl-2-pentanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Acetone	NELAP	0.0086	0.043	J	0.026	mg/Kg-dry	1	10/24/2013 18:11	93073
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Bromodichloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-001

Client Sample ID: 2396-4-B01

Matrix: SOLID

Collection Date: 10/22/2013 12:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromoform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Bromomethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Carbon disulfide	NELAP	0.0026	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Carbon tetrachloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Chlorobenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Chloroethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Chloroform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Chloromethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
cis-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
cis-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Dibromochloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Ethylbenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
m,p-Xylenes	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Methylene chloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
o-Xylene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Styrene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Tetrachloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Toluene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
trans-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
trans-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Trichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Vinyl acetate	NELAP	0.0172	0.043		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Xylenes, Total	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:11	93073
Surr: 1,2-Dichloroethane-d4		0	72.2-131		110.8	%REC	1	10/24/2013 18:11	93073
Surr: 4-Bromofluorobenzene		0	82.1-116		109.5	%REC	1	10/24/2013 18:11	93073
Surr: Dibromofluoromethane		0	77.7-120		105.5	%REC	1	10/24/2013 18:11	93073
Surr: Toluene-d8		0	86-116		91.9	%REC	1	10/24/2013 18:11	93073

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-002

Client Sample ID: 2396-4-B02

Matrix: SOLID

Collection Date: 10/22/2013 12:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		13.4	%	1	10/24/2013 15:29	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		86.6	%	1	10/24/2013 15:29	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.08		1	10/24/2013 19:50	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 9:14	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0734	mg/L	1	10/28/2013 16:17	93085
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/28/2013 16:17	93085
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 16:17	93085
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 16:17	93085
Chromium	NELAP	0.004	0.01		0.0105	mg/L	1	10/28/2013 16:17	93085
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/28/2013 16:17	93085
Iron	NELAP	0.007	0.02	X	8.51	mg/L	1	10/28/2013 16:17	93085
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 16:17	93085
Manganese	NELAP	0.0016	0.005		0.0482	mg/L	1	10/28/2013 16:17	93085
Nickel	NELAP	0.0033	0.01	J	0.0074	mg/L	1	10/28/2013 16:17	93085
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 16:17	93085
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 16:17	93085
Zinc	NELAP	0.0021	0.01		0.0207	mg/L	1	10/28/2013 16:17	93085
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	10/29/2013 21:11	93087
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 10:29	93087
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 12:37	93092
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.36	4.55		< 4.55	mg/Kg-dry	1	10/28/2013 21:51	93063
Arsenic	NELAP	1.18	2.36		6.08	mg/Kg-dry	1	10/25/2013 16:23	93041
Barium	NELAP	0.24	0.47		89.2	mg/Kg-dry	1	10/25/2013 16:23	93041
Beryllium	NELAP	0.05	0.09		0.75	mg/Kg-dry	1	10/25/2013 16:23	93041
Boron	NELAP	0.94	1.89		10.3	mg/Kg-dry	1	10/25/2013 16:23	93041
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	10/25/2013 16:23	93041
Calcium	NELAP	2.36	4.72		49900	mg/Kg-dry	1	10/25/2013 16:23	93041
Chromium	NELAP	0.47	0.94	X	21.4	mg/Kg-dry	1	10/25/2013 16:23	93041
Cobalt	NELAP	0.47	0.94		6.44	mg/Kg-dry	1	10/25/2013 16:23	93041
Copper	NELAP	0.47	0.94		17.1	mg/Kg-dry	1	10/25/2013 16:23	93041
Iron	NELAP	0.94	1.89	BX	20700	mg/Kg-dry	1	10/25/2013 16:23	93041
Lead	NELAP	1.89	3.77		8.59	mg/Kg-dry	1	10/25/2013 16:23	93041
Magnesium	NELAP	0.47	0.94		25300	mg/Kg-dry	1	10/25/2013 16:23	93041
Manganese	NELAP	0.24	0.47		435	mg/Kg-dry	1	10/25/2013 16:23	93041
Nickel	NELAP	0.47	0.94		19.4	mg/Kg-dry	1	10/25/2013 16:23	93041
Potassium	NELAP	4.72	9.43		2250	mg/Kg-dry	1	10/25/2013 16:23	93041
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	10/28/2013 16:10	93041
Sodium	NELAP	2.36	4.72		754	mg/Kg-dry	1	10/25/2013 16:23	93041
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	10/25/2013 16:23	93041

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-002

Client Sample ID: 2396-4-B02

Matrix: SOLID

Collection Date: 10/22/2013 12:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.47	0.94		33.9	mg/Kg-dry	1	10/25/2013 16:23	93041
Zinc	NELAP	0.47	0.94		36	mg/Kg-dry	1	10/25/2013 16:23	93041
<i>Sample result for Fe exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.35	0.6		< 0.6	mg/Kg-dry	1	10/28/2013 14:05	93057
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.036	mg/Kg-dry	1	10/25/2013 11:23	93029
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.154	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
1,2-Dichlorobenzene	NELAP	0.184	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
1,3-Dichlorobenzene	NELAP	0.194	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
1,4-Dichlorobenzene	NELAP	0.184	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
2,4,5-Trichlorophenol	NELAP	0.11	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
2,4,6-Trichlorophenol	NELAP	0.146	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
2,4-Dichlorophenol	NELAP	0.14	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
2,4-Dimethylphenol	NELAP	0.147	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
2,4-Dinitrophenol	NELAP	0.124	1.16		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
2,4-Dinitrotoluene	NELAP	0.12	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
2,6-Dinitrotoluene	NELAP	0.125	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
2-Chloronaphthalene	NELAP	0.139	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
2-Chlorophenol	NELAP	0.147	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
2-Methylnaphthalene	NELAP	0.138	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
2-Nitroaniline	NELAP	0.105	1.16		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
2-Nitrophenol	NELAP	0.13	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
3,3'-Dichlorobenzidine	NELAP	0.231	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
3-Nitroaniline	NELAP	0.095	1.16		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
4,6-Dinitro-2-methylphenol	NELAP	0.125	1.16		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
4-Bromophenyl phenyl ether	NELAP	0.106	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
4-Chloro-3-methylphenol	NELAP	0.127	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
4-Chloroaniline	NELAP	0.14	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
4-Chlorophenyl phenyl ether	NELAP	0.115	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
4-Nitroaniline	NELAP	0.105	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
4-Nitrophenol	NELAP	0.113	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Acenaphthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Acenaphthylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Benzo(a)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Benzo(a)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Benzo(b)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Benzo(g,h,i)perylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Benzo(k)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Bis(2-chloroethoxy)methane	NELAP	0.135	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Bis(2-chloroethyl)ether	NELAP	0.164	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Bis(2-chloroisopropyl)ether	NELAP	0.132	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Bis(2-ethylhexyl)phthalate	NELAP	0.135	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Butyl benzyl phthalate	NELAP	0.117	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Carbazole		0.141	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-002

Client Sample ID: 2396-4-B02

Matrix: SOLID

Collection Date: 10/22/2013 12:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Dibenzo(a,h)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Dibenzofuran	NELAP	0.146	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Diethyl phthalate	NELAP	0.111	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Dimethyl phthalate	NELAP	0.105	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Di-n-butyl phthalate	NELAP	0.119	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Di-n-octyl phthalate	NELAP	0.12	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Fluorene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Hexachlorobenzene	NELAP	0.113	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Hexachlorobutadiene	NELAP	0.179	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Hexachlorocyclopentadiene	NELAP	0.118	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Hexachloroethane	NELAP	0.193	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Isophorone	NELAP	0.137	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
m,p-Cresol	NELAP	0.146	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Naphthalene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Nitrobenzene	NELAP	0.145	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
N-Nitroso-di-n-propylamine	NELAP	0.127	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
N-Nitrosodiphenylamine	NELAP	0.106	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
o-Cresol	NELAP	0.137	0.578		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Pentachlorophenol	NELAP	0.763	2.31		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Phenanthrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Phenol	NELAP	0.134	0.405		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 23:18	93033
Surr: 2,4,6-Tribromophenol		0	32.7-130		67.7	%REC	1	10/25/2013 23:18	93033
Surr: 2-Fluorobiphenyl		0	34.1-116		66.5	%REC	1	10/25/2013 23:18	93033
Surr: 2-Fluorophenol		0	30.5-99		60.7	%REC	1	10/25/2013 23:18	93033
Surr: Nitrobenzene-d5		0	34.1-101		58.9	%REC	1	10/25/2013 23:18	93033
Surr: Phenol-d5		0	34.9-110		75.1	%REC	1	10/25/2013 23:18	93033
Surr: p-Terphenyl-d14		0	41.7-124		78.8	%REC	1	10/25/2013 23:18	93033
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
1,1,2,2-Tetrachloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
1,1,2-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
1,1-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
1,1-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
1,2-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
1,2-Dichloropropane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
1,3-Dichloropropene, Total		0.0009	0.003		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
2-Butanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
2-Hexanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
4-Methyl-2-pentanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Acetone	NELAP	0.0086	0.043		0.045	mg/Kg-dry	1	10/24/2013 18:38	93073
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Bromodichloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Bromoform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-002

Client Sample ID: 2396-4-B02

Matrix: SOLID

Collection Date: 10/22/2013 12:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Carbon disulfide	NELAP	0.0026	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Carbon tetrachloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Chlorobenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Chloroethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Chloroform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Chloromethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
cis-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
cis-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Dibromochloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Ethylbenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
m,p-Xylenes	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Methylene chloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
o-Xylene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Styrene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Tetrachloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Toluene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
trans-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
trans-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Trichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Vinyl acetate	NELAP	0.0172	0.043		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Xylenes, Total	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 18:38	93073
Surr: 1,2-Dichloroethane-d4		0	72.2-131		112.3	%REC	1	10/24/2013 18:38	93073
Surr: 4-Bromofluorobenzene		0	82.1-116		108.3	%REC	1	10/24/2013 18:38	93073
Surr: Dibromofluoromethane		0	77.7-120		106.3	%REC	1	10/24/2013 18:38	93073
Surr: Toluene-d8		0	86-116		90.9	%REC	1	10/24/2013 18:38	93073

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-003

Client Sample ID: 2396-4-B03

Matrix: SOLID

Collection Date: 10/22/2013 12:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		11.8	%	1	10/24/2013 15:30	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		88.2	%	1	10/24/2013 15:30	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.9		1	10/24/2013 19:54	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		0.582	mg/L	1	10/31/2013 9:18	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0548	mg/L	1	10/28/2013 16:28	93085
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/28/2013 16:28	93085
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 16:28	93085
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 16:28	93085
Chromium	NELAP	0.004	0.01	J	0.0085	mg/L	1	10/28/2013 16:28	93085
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/28/2013 16:28	93085
Iron	NELAP	0.007	0.02	X	6.92	mg/L	1	10/28/2013 16:28	93085
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 16:28	93085
Manganese	NELAP	0.0016	0.005		0.0437	mg/L	1	10/28/2013 16:28	93085
Nickel	NELAP	0.0033	0.01	J	0.0063	mg/L	1	10/28/2013 16:28	93085
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 16:28	93085
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 16:28	93085
Zinc	NELAP	0.0021	0.01		0.0164	mg/L	1	10/28/2013 16:28	93085
SW-846 1312, 3020A, 7010 METALS IN SPLP EXTRACT BY GFAA									
Antimony, SPLP by GFAA	NELAP	0.0017	0.005	S	< 0.005	mg/L	1	10/30/2013 9:52	93087
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 10:40	93087
<i>Sb - Matrix interference present in sample. Confirmed by bench spike.</i>									
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 12:39	93092
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	10/28/2013 21:57	93063
Arsenic	NELAP	1.23	2.45		9.86	mg/Kg-dry	1	10/25/2013 16:29	93041
Barium	NELAP	0.25	0.49		114	mg/Kg-dry	1	10/25/2013 16:29	93041
Beryllium	NELAP	0.05	0.1		1.21	mg/Kg-dry	1	10/25/2013 16:29	93041
Boron	NELAP	0.98	1.96		11.5	mg/Kg-dry	1	10/25/2013 16:29	93041
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	10/25/2013 16:29	93041
Calcium	NELAP	2.45	4.9		3110	mg/Kg-dry	1	10/25/2013 16:29	93041
Chromium	NELAP	0.49	0.98	X	29.7	mg/Kg-dry	1	10/25/2013 16:29	93041
Cobalt	NELAP	0.49	0.98		13.5	mg/Kg-dry	1	10/25/2013 16:29	93041
Copper	NELAP	0.49	0.98		23.9	mg/Kg-dry	1	10/25/2013 16:29	93041
Iron	NELAP	0.98	1.96	BX	30200	mg/Kg-dry	1	10/25/2013 16:29	93041
Lead	NELAP	1.96	3.92		15.3	mg/Kg-dry	1	10/25/2013 16:29	93041
Magnesium	NELAP	0.49	0.98		4890	mg/Kg-dry	1	10/25/2013 16:29	93041
Manganese	NELAP	0.25	0.49	X	1040	mg/Kg-dry	1	10/25/2013 16:29	93041
Nickel	NELAP	0.49	0.98		38.7	mg/Kg-dry	1	10/25/2013 16:29	93041
Potassium	NELAP	4.9	9.8		2550	mg/Kg-dry	1	10/25/2013 16:29	93041
Silver	NELAP	0.49	0.54		< 0.54	mg/Kg-dry	1	10/28/2013 16:16	93041
Sodium	NELAP	2.45	4.9		789	mg/Kg-dry	1	10/25/2013 16:29	93041
Thallium	NELAP	2.45	2.55		< 2.55	mg/Kg-dry	1	10/25/2013 16:29	93041

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-003

Client Sample ID: 2396-4-B03

Matrix: SOLID

Collection Date: 10/22/2013 12:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.49	0.98		43.4	mg/Kg-dry	1	10/25/2013 16:29	93041
Zinc	NELAP	0.49	0.98		52	mg/Kg-dry	1	10/25/2013 16:29	93041
<i>Sample result for Fe exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.33	0.566		< 0.566	mg/Kg-dry	1	10/28/2013 14:08	93057
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.057	mg/Kg-dry	1	10/25/2013 11:25	93029
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.148	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
1,2-Dichlorobenzene	NELAP	0.177	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
1,3-Dichlorobenzene	NELAP	0.187	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
1,4-Dichlorobenzene	NELAP	0.177	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
2,4,5-Trichlorophenol	NELAP	0.106	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
2,4,6-Trichlorophenol	NELAP	0.14	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
2,4-Dichlorophenol	NELAP	0.135	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
2,4-Dimethylphenol	NELAP	0.142	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
2,4-Dinitrophenol	NELAP	0.119	1.11		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
2,4-Dinitrotoluene	NELAP	0.116	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
2,6-Dinitrotoluene	NELAP	0.12	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
2-Chloronaphthalene	NELAP	0.134	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
2-Chlorophenol	NELAP	0.142	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
2-Methylnaphthalene	NELAP	0.133	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
2-Nitroaniline	NELAP	0.101	1.11		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
2-Nitrophenol	NELAP	0.125	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
3,3'-Dichlorobenzidine	NELAP	0.223	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
3-Nitroaniline	NELAP	0.091	1.11		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
4,6-Dinitro-2-methylphenol	NELAP	0.12	1.11		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
4-Bromophenyl phenyl ether	NELAP	0.103	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
4-Chloro-3-methylphenol	NELAP	0.123	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
4-Chloroaniline	NELAP	0.135	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
4-Chlorophenyl phenyl ether	NELAP	0.11	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
4-Nitroaniline	NELAP	0.101	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
4-Nitrophenol	NELAP	0.109	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Acenaphthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Acenaphthylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Benzo(a)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Benzo(a)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Benzo(b)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Benzo(g,h,i)perylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Benzo(k)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Bis(2-chloroethoxy)methane	NELAP	0.13	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Bis(2-chloroethyl)ether	NELAP	0.158	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Bis(2-chloroisopropyl)ether	NELAP	0.127	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Bis(2-ethylhexyl)phthalate	NELAP	0.13	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Butyl benzyl phthalate	NELAP	0.113	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Carbazole		0.136	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-003

Client Sample ID: 2396-4-B03

Matrix: SOLID

Collection Date: 10/22/2013 12:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Dibenzo(a,h)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Dibenzofuran	NELAP	0.14	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Diethyl phthalate	NELAP	0.107	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Dimethyl phthalate	NELAP	0.101	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Di-n-butyl phthalate	NELAP	0.115	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Di-n-octyl phthalate	NELAP	0.116	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Fluorene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Hexachlorobenzene	NELAP	0.109	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Hexachlorobutadiene	NELAP	0.173	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Hexachlorocyclopentadiene	NELAP	0.114	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Hexachloroethane	NELAP	0.186	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Isophorone	NELAP	0.132	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
m,p-Cresol	NELAP	0.14	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Naphthalene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Nitrobenzene	NELAP	0.139	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
N-Nitroso-di-n-propylamine	NELAP	0.123	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
N-Nitrosodiphenylamine	NELAP	0.103	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
o-Cresol	NELAP	0.132	0.557		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Pentachlorophenol	NELAP	0.736	2.23		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Phenanthrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Phenol	NELAP	0.129	0.39		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	10/25/2013 19:22	93033
Surr: 2,4,6-Tribromophenol		0	32.7-130		72.6	%REC	1	10/25/2013 19:22	93033
Surr: 2-Fluorobiphenyl		0	34.1-116		72.2	%REC	1	10/25/2013 19:22	93033
Surr: 2-Fluorophenol		0	30.5-99		64.3	%REC	1	10/25/2013 19:22	93033
Surr: Nitrobenzene-d5		0	34.1-101		63.6	%REC	1	10/25/2013 19:22	93033
Surr: Phenol-d5		0	34.9-110		77.4	%REC	1	10/25/2013 19:22	93033
Surr: p-Terphenyl-d14		0	41.7-124		80.6	%REC	1	10/25/2013 19:22	93033
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
1,1,1,2-Tetrachloroethane	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
1,1,2-Trichloroethane	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
1,1-Dichloroethane	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
1,1-Dichloroethene	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
1,2-Dichloroethane	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
1,2-Dichloropropane	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
1,3-Dichloropropene, Total		0.0207	0.083		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
2-Butanone	NELAP	0.207	1.03		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
2-Hexanone	NELAP	0.207	1.03		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
4-Methyl-2-pentanone	NELAP	0.207	1.03		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Acetone	NELAP	0.207	1.03		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Benzene	NELAP	0.0103	0.021		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Bromodichloromethane	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Bromoform	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-003

Client Sample ID: 2396-4-B03

Matrix: SOLID

Collection Date: 10/22/2013 12:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0414	0.207		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Carbon disulfide	NELAP	0.062	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Carbon tetrachloride	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Chlorobenzene	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Chloroethane	NELAP	0.0414	0.207		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Chloroform	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Chloromethane	NELAP	0.0414	0.207		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
cis-1,2-Dichloroethene	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
cis-1,3-Dichloropropene	NELAP	0.0207	0.083		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Dibromochloromethane	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Ethylbenzene	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
m,p-Xylenes	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Methyl tert-butyl ether	NELAP	0.0103	0.041		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Methylene chloride	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
o-Xylene	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Styrene	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Tetrachloroethene	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Toluene	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
trans-1,2-Dichloroethene	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
trans-1,3-Dichloropropene	NELAP	0.0207	0.083		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Trichloroethene	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Vinyl acetate	NELAP	0.414	1.03		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Vinyl chloride	NELAP	0.0103	0.041		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Xylenes, Total	NELAP	0.0207	0.103		ND	mg/Kg-dry	12.5	10/25/2013 20:18	93080
Surr: 1,2-Dichloroethane-d4		0	72.2-131		81	%REC	12.5	10/25/2013 20:18	93080
Surr: 4-Bromofluorobenzene		0	82.1-116		96.4	%REC	12.5	10/25/2013 20:18	93080
Surr: Dibromofluoromethane		0	77.7-120		84.8	%REC	12.5	10/25/2013 20:18	93080
Surr: Toluene-d8		0	86-116		96.4	%REC	12.5	10/25/2013 20:18	93080

Elevated reporting limit due to matrix interference.

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-004

Client Sample ID: 2396-4-B04

Matrix: SOLID

Collection Date: 10/22/2013 12:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		21.7	%	1	10/24/2013 15:30	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		78.3	%	1	10/24/2013 15:30	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.8		1	10/24/2013 19:59	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 9:29	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0987	mg/L	1	10/28/2013 16:32	93085
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/28/2013 16:32	93085
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 16:32	93085
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 16:32	93085
Chromium	NELAP	0.004	0.01		0.0102	mg/L	1	10/28/2013 16:32	93085
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/28/2013 16:32	93085
Iron	NELAP	0.007	0.02	X	6.14	mg/L	1	10/28/2013 16:32	93085
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 16:32	93085
Manganese	NELAP	0.0016	0.005		0.0162	mg/L	1	10/28/2013 16:32	93085
Nickel	NELAP	0.0033	0.01	J	0.0062	mg/L	1	10/28/2013 16:32	93085
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 16:32	93085
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 16:32	93085
Zinc	NELAP	0.0021	0.01		0.0235	mg/L	1	10/28/2013 16:32	93085
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	10/29/2013 21:26	93087
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 10:50	93087
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 12:41	93092
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	10/28/2013 22:03	93063
Arsenic	NELAP	1.25	2.5		3.96	mg/Kg-dry	1	10/25/2013 16:36	93041
Barium	NELAP	0.25	0.5		259	mg/Kg-dry	1	10/25/2013 16:36	93041
Beryllium	NELAP	0.05	0.1		1.1	mg/Kg-dry	1	10/25/2013 16:36	93041
Boron	NELAP	1	2		6.09	mg/Kg-dry	1	10/25/2013 16:36	93041
Cadmium	NELAP	0.1	0.2		0.3	mg/Kg-dry	1	10/25/2013 16:36	93041
Calcium	NELAP	2.5	5		9380	mg/Kg-dry	1	10/25/2013 16:36	93041
Chromium	NELAP	0.5	1	X	26.7	mg/Kg-dry	1	10/25/2013 16:36	93041
Cobalt	NELAP	0.5	1		4.98	mg/Kg-dry	1	10/25/2013 16:36	93041
Copper	NELAP	0.5	1		27.9	mg/Kg-dry	1	10/25/2013 16:36	93041
Iron	NELAP	1	2	BX	21000	mg/Kg-dry	1	10/25/2013 16:36	93041
Lead	NELAP	2	4		14.3	mg/Kg-dry	1	10/25/2013 16:36	93041
Magnesium	NELAP	0.5	1		4520	mg/Kg-dry	1	10/25/2013 16:36	93041
Manganese	NELAP	0.25	0.5		92.4	mg/Kg-dry	1	10/25/2013 16:36	93041
Nickel	NELAP	0.5	1		20.9	mg/Kg-dry	1	10/25/2013 16:36	93041
Potassium	NELAP	5	10		1160	mg/Kg-dry	1	10/25/2013 16:36	93041
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	10/25/2013 16:36	93041
Sodium	NELAP	2.5	5		1950	mg/Kg-dry	1	10/25/2013 16:36	93041
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	10/25/2013 16:36	93041

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-004

Client Sample ID: 2396-4-B04

Matrix: SOLID

Collection Date: 10/22/2013 12:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.5	1		43.1	mg/Kg-dry	1	10/25/2013 16:36	93041
Zinc	NELAP	0.5	1		60.5	mg/Kg-dry	1	10/25/2013 16:36	93041
<i>Sample result for Fe exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.33	0.566		< 0.566	mg/Kg-dry	1	10/28/2013 14:11	93057
SW-846 7471B									
Mercury	NELAP	0.003	0.013		0.05	mg/Kg-dry	1	10/25/2013 11:27	93029
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.171	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
1,2-Dichlorobenzene	NELAP	0.205	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
1,3-Dichlorobenzene	NELAP	0.217	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
1,4-Dichlorobenzene	NELAP	0.205	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
2,4,5-Trichlorophenol	NELAP	0.122	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
2,4,6-Trichlorophenol	NELAP	0.162	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
2,4-Dichlorophenol	NELAP	0.156	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
2,4-Dimethylphenol	NELAP	0.164	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
2,4-Dinitrophenol	NELAP	0.138	1.29		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
2,4-Dinitrotoluene	NELAP	0.134	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
2,6-Dinitrotoluene	NELAP	0.139	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
2-Chloronaphthalene	NELAP	0.155	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
2-Chlorophenol	NELAP	0.164	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
2-Methylnaphthalene	NELAP	0.153	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
2-Nitroaniline	NELAP	0.117	1.29		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
2-Nitrophenol	NELAP	0.144	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
3,3'-Dichlorobenzidine	NELAP	0.258	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
3-Nitroaniline	NELAP	0.106	1.29		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
4,6-Dinitro-2-methylphenol	NELAP	0.139	1.29		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
4-Bromophenyl phenyl ether	NELAP	0.119	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
4-Chloro-3-methylphenol	NELAP	0.142	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
4-Chloroaniline	NELAP	0.156	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
4-Chlorophenyl phenyl ether	NELAP	0.128	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
4-Nitroaniline	NELAP	0.117	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
4-Nitrophenol	NELAP	0.126	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Acenaphthene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Acenaphthylene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Anthracene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Benzo(a)anthracene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Benzo(a)pyrene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Benzo(b)fluoranthene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Benzo(g,h,i)perylene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Benzo(k)fluoranthene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Bis(2-chloroethoxy)methane	NELAP	0.151	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Bis(2-chloroethyl)ether	NELAP	0.183	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Bis(2-chloroisopropyl)ether	NELAP	0.147	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Bis(2-ethylhexyl)phthalate	NELAP	0.151	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Butyl benzyl phthalate	NELAP	0.13	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Carbazole		0.157	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-004

Client Sample ID: 2396-4-B04

Matrix: SOLID

Collection Date: 10/22/2013 12:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Dibenzo(a,h)anthracene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Dibenzofuran	NELAP	0.162	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Diethyl phthalate	NELAP	0.124	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Dimethyl phthalate	NELAP	0.117	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Di-n-butyl phthalate	NELAP	0.133	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Di-n-octyl phthalate	NELAP	0.134	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Fluoranthene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Fluorene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Hexachlorobenzene	NELAP	0.126	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Hexachlorobutadiene	NELAP	0.2	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Hexachlorocyclopentadiene	NELAP	0.131	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Hexachloroethane	NELAP	0.215	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Indeno(1,2,3-cd)pyrene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Isophorone	NELAP	0.152	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
m,p-Cresol	NELAP	0.162	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Naphthalene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Nitrobenzene	NELAP	0.161	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
N-Nitroso-di-n-propylamine	NELAP	0.142	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
N-Nitrosodiphenylamine	NELAP	0.119	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
o-Cresol	NELAP	0.152	0.645		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Pentachlorophenol	NELAP	0.851	2.58		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Phenanthrene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Phenol	NELAP	0.15	0.451		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Pyrene	NELAP	0.022	0.044		ND	mg/Kg-dry	1	10/25/2013 19:56	93033
Surr: 2,4,6-Tribromophenol		0	32.7-130		78.2	%REC	1	10/25/2013 19:56	93033
Surr: 2-Fluorobiphenyl		0	34.1-116		74.9	%REC	1	10/25/2013 19:56	93033
Surr: 2-Fluorophenol		0	30.5-99		69.4	%REC	1	10/25/2013 19:56	93033
Surr: Nitrobenzene-d5		0	34.1-101		66.4	%REC	1	10/25/2013 19:56	93033
Surr: Phenol-d5		0	34.9-110		82.1	%REC	1	10/25/2013 19:56	93033
Surr: p-Terphenyl-d14		0	41.7-124		84.4	%REC	1	10/25/2013 19:56	93033
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
1,1,2,2-Tetrachloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
1,1,2-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
1,1-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
1,1-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
1,2-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
1,2-Dichloropropane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
1,3-Dichloropropene, Total		0.001	0.004		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
2-Butanone	NELAP	0.0102	0.051		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
2-Hexanone	NELAP	0.0102	0.051		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
4-Methyl-2-pentanone	NELAP	0.0102	0.051		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Acetone	NELAP	0.0102	0.051	J	0.029	mg/Kg-dry	1	10/24/2013 19:30	93073
Benzene	NELAP	0.0005	0.001		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Bromodichloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Bromoform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-004

Client Sample ID: 2396-4-B04

Matrix: SOLID

Collection Date: 10/22/2013 12:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Carbon disulfide	NELAP	0.0031	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Carbon tetrachloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Chlorobenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Chloroethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Chloroform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Chloromethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
cis-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
cis-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Dibromochloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Ethylbenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
m,p-Xylenes	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Methylene chloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
o-Xylene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Styrene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Tetrachloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Toluene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
trans-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
trans-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Trichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Vinyl acetate	NELAP	0.0203	0.051		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Xylenes, Total	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 19:30	93073
Surr: 1,2-Dichloroethane-d4		0	72.2-131		112	%REC	1	10/24/2013 19:30	93073
Surr: 4-Bromofluorobenzene		0	82.1-116		102.5	%REC	1	10/24/2013 19:30	93073
Surr: Dibromofluoromethane		0	77.7-120		105.8	%REC	1	10/24/2013 19:30	93073
Surr: Toluene-d8		0	86-116		92.3	%REC	1	10/24/2013 19:30	93073

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-005

Client Sample ID: 2396-4-B05

Matrix: SOLID

Collection Date: 10/22/2013 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		15.1	%	1	10/24/2013 15:30	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		84.9	%	1	10/24/2013 15:30	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.47		1	10/24/2013 20:01	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 9:33	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0785	mg/L	1	10/28/2013 16:35	93085
Beryllium	NELAP	0.0003	0.001	J	0.0003	mg/L	1	10/28/2013 16:35	93085
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 16:35	93085
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 16:35	93085
Chromium	NELAP	0.004	0.01		0.0116	mg/L	1	10/28/2013 16:35	93085
Cobalt	NELAP	0.0022	0.01	J	0.0027	mg/L	1	10/28/2013 16:35	93085
Iron	NELAP	0.007	0.02	X	10.2	mg/L	1	10/28/2013 16:35	93085
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 16:35	93085
Manganese	NELAP	0.0016	0.005		0.0836	mg/L	1	10/28/2013 16:35	93085
Nickel	NELAP	0.0033	0.01	J	0.0099	mg/L	1	10/28/2013 16:35	93085
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 16:35	93085
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 16:35	93085
Zinc	NELAP	0.0021	0.01		0.0191	mg/L	1	10/28/2013 16:35	93085
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	10/29/2013 21:52	93087
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 10:53	93087
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 12:44	93092
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.41	4.63		< 4.63	mg/Kg-dry	1	10/28/2013 22:09	93063
Arsenic	NELAP	1.16	2.31	J	1.41	mg/Kg-dry	1	10/25/2013 17:00	93041
Barium	NELAP	0.23	0.46		29.6	mg/Kg-dry	1	10/25/2013 17:00	93041
Beryllium	NELAP	0.05	0.09		0.31	mg/Kg-dry	1	10/25/2013 17:00	93041
Boron	NELAP	0.93	1.85		9.44	mg/Kg-dry	1	10/25/2013 17:00	93041
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	10/25/2013 17:00	93041
Calcium	NELAP	2.31	4.63	S	131000	mg/Kg-dry	1	10/25/2013 17:00	93041
Chromium	NELAP	0.46	0.93		9.72	mg/Kg-dry	1	10/25/2013 17:00	93041
Cobalt	NELAP	0.46	0.93		3.2	mg/Kg-dry	1	10/25/2013 17:00	93041
Copper	NELAP	0.46	0.93		10	mg/Kg-dry	1	10/25/2013 17:00	93041
Iron	NELAP	0.93	1.85	BS	9290	mg/Kg-dry	1	10/25/2013 17:00	93041
Lead	NELAP	1.85	3.7		3.7	mg/Kg-dry	1	10/25/2013 17:00	93041
Magnesium	NELAP	0.46	0.93	S	62100	mg/Kg-dry	1	10/25/2013 17:00	93041
Manganese	NELAP	0.23	0.46		230	mg/Kg-dry	1	10/25/2013 17:00	93041
Nickel	NELAP	0.46	0.93		8.17	mg/Kg-dry	1	10/25/2013 17:00	93041
Potassium	NELAP	4.63	9.26	S	1490	mg/Kg-dry	1	10/25/2013 17:00	93041
Silver	NELAP	0.46	0.51		< 0.51	mg/Kg-dry	1	10/25/2013 17:00	93041
Sodium	NELAP	2.31	4.63	S	1470	mg/Kg-dry	1	10/25/2013 17:00	93041
Thallium	NELAP	2.31	2.41		< 2.41	mg/Kg-dry	1	10/25/2013 17:00	93041

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-005

Client Sample ID: 2396-4-B05

Matrix: SOLID

Collection Date: 10/22/2013 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
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SW-846 3050B, 6010B, METALS BY ICP

Vanadium	NELAP	0.46	0.93		16.7	mg/Kg-dry	1	10/25/2013 17:00	93041
Zinc	NELAP	0.46	0.93		13	mg/Kg-dry	1	10/25/2013 17:00	93041

Sample result for Fe exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).

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

SW-846 3050B, 7010 METALS BY GFAA

Selenium	NELAP	0.343	0.588	S	< 0.588	mg/Kg-dry	1	10/28/2013 14:15	93057
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Se - Matrix interference present in sample. Confirmed by bench spike.

SW-846 7471B

Mercury	NELAP	0.003	0.011		0.015	mg/Kg-dry	1	10/25/2013 11:30	93029
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SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

1,2,4-Trichlorobenzene	NELAP	0.154	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
1,2-Dichlorobenzene	NELAP	0.185	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
1,3-Dichlorobenzene	NELAP	0.195	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
1,4-Dichlorobenzene	NELAP	0.185	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
2,4,5-Trichlorophenol	NELAP	0.11	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
2,4,6-Trichlorophenol	NELAP	0.146	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
2,4-Dichlorophenol	NELAP	0.141	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
2,4-Dimethylphenol	NELAP	0.147	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
2,4-Dinitrophenol	NELAP	0.124	1.16		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
2,4-Dinitrotoluene	NELAP	0.121	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
2,6-Dinitrotoluene	NELAP	0.125	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
2-Chloronaphthalene	NELAP	0.139	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
2-Chlorophenol	NELAP	0.147	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
2-Methylnaphthalene	NELAP	0.138	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
2-Nitroaniline	NELAP	0.106	1.16		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
2-Nitrophenol	NELAP	0.13	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
3,3'-Dichlorobenzidine	NELAP	0.232	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
3-Nitroaniline	NELAP	0.095	1.16		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
4,6-Dinitro-2-methylphenol	NELAP	0.125	1.16		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
4-Bromophenyl phenyl ether	NELAP	0.107	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
4-Chloro-3-methylphenol	NELAP	0.128	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
4-Chloroaniline	NELAP	0.141	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
4-Chlorophenyl phenyl ether	NELAP	0.115	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
4-Nitroaniline	NELAP	0.106	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
4-Nitrophenol	NELAP	0.114	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Acenaphthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Acenaphthylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Benzo(a)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Benzo(a)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Benzo(b)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Benzo(g,h,i)perylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Benzo(k)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Bis(2-chloroethoxy)methane	NELAP	0.136	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Bis(2-chloroethyl)ether	NELAP	0.165	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Bis(2-chloroisopropyl)ether	NELAP	0.132	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Bis(2-ethylhexyl)phthalate	NELAP	0.136	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-005

Client Sample ID: 2396-4-B05

Matrix: SOLID

Collection Date: 10/22/2013 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Butyl benzyl phthalate	NELAP	0.117	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Carbazole		0.142	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Chrysene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Dibenzo(a,h)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Dibenzofuran	NELAP	0.146	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Diethyl phthalate	NELAP	0.111	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Dimethyl phthalate	NELAP	0.106	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Di-n-butyl phthalate	NELAP	0.12	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Di-n-octyl phthalate	NELAP	0.121	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Fluorene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Hexachlorobenzene	NELAP	0.114	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Hexachlorobutadiene	NELAP	0.18	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Hexachlorocyclopentadiene	NELAP	0.118	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Hexachloroethane	NELAP	0.194	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Isophorone	NELAP	0.137	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
m,p-Cresol	NELAP	0.146	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Naphthalene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Nitrobenzene	NELAP	0.145	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
N-Nitroso-di-n-propylamine	NELAP	0.128	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
N-Nitrosodiphenylamine	NELAP	0.107	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
o-Cresol	NELAP	0.137	0.581		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Pentachlorophenol	NELAP	0.766	2.32		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Phenanthrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Phenol	NELAP	0.135	0.406		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 20:30	93033
Surr: 2,4,6-Tribromophenol		0	32.7-130		75.2	%REC	1	10/25/2013 20:30	93033
Surr: 2-Fluorobiphenyl		0	34.1-116		71.5	%REC	1	10/25/2013 20:30	93033
Surr: 2-Fluorophenol		0	30.5-99		68.9	%REC	1	10/25/2013 20:30	93033
Surr: Nitrobenzene-d5		0	34.1-101		64.3	%REC	1	10/25/2013 20:30	93033
Surr: Phenol-d5		0	34.9-110		82.1	%REC	1	10/25/2013 20:30	93033
Surr: p-Terphenyl-d14		0	41.7-124		82.1	%REC	1	10/25/2013 20:30	93033
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
2-Butanone	NELAP	0.0078	0.039		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
2-Hexanone	NELAP	0.0078	0.039		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
4-Methyl-2-pentanone	NELAP	0.0078	0.039		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Acetone	NELAP	0.0078	0.039	J	0.016	mg/Kg-dry	1	10/24/2013 19:56	93073
Benzene	NELAP	0.0004	0.001		0.001	mg/Kg-dry	1	10/24/2013 19:56	93073

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-005

Client Sample ID: 2396-4-B05

Matrix: SOLID

Collection Date: 10/22/2013 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Bromomethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Carbon disulfide	NELAP	0.0024	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Chloroethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Chloromethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Ethylbenzene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/24/2013 19:56	93073
m,p-Xylenes	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/24/2013 19:56	93073
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Toluene	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	10/24/2013 19:56	93073
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Vinyl acetate	NELAP	0.0157	0.039		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/24/2013 19:56	93073
Xylenes, Total	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/24/2013 19:56	93073
Surr: 1,2-Dichloroethane-d4		0	72.2-131		111.9	%REC	1	10/24/2013 19:56	93073
Surr: 4-Bromofluorobenzene		0	82.1-116		108.3	%REC	1	10/24/2013 19:56	93073
Surr: Dibromofluoromethane		0	77.7-120		107.3	%REC	1	10/24/2013 19:56	93073
Surr: Toluene-d8		0	86-116		90.8	%REC	1	10/24/2013 19:56	93073

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-006

Client Sample ID: 2396-4-B05 DUP

Matrix: SOLID

Collection Date: 10/22/2013 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		12.3	%	1	10/24/2013 16:27	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		87.7	%	1	10/24/2013 16:27	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.56		1	10/24/2013 20:03	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 9:47	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0816	mg/L	1	10/28/2013 16:39	93085
Beryllium	NELAP	0.0003	0.001	J	0.0003	mg/L	1	10/28/2013 16:39	93085
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 16:39	93085
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 16:39	93085
Chromium	NELAP	0.004	0.01		0.0124	mg/L	1	10/28/2013 16:39	93085
Cobalt	NELAP	0.0022	0.01	J	0.0027	mg/L	1	10/28/2013 16:39	93085
Iron	NELAP	0.007	0.02	X	10.7	mg/L	1	10/28/2013 16:39	93085
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 16:39	93085
Manganese	NELAP	0.0016	0.005		0.0944	mg/L	1	10/28/2013 16:39	93085
Nickel	NELAP	0.0033	0.01		0.0106	mg/L	1	10/28/2013 16:39	93085
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 16:39	93085
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 16:39	93085
Zinc	NELAP	0.0021	0.01		0.0221	mg/L	1	10/28/2013 16:39	93085
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	10/29/2013 21:56	93087
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 10:57	93087
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 12:55	93092
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.36	4.55		< 4.55	mg/Kg-dry	1	10/28/2013 22:15	93063
Arsenic	NELAP	1.25	2.5		2.69	mg/Kg-dry	1	10/25/2013 17:18	93041
Barium	NELAP	0.25	0.5		32.2	mg/Kg-dry	1	10/25/2013 17:18	93041
Beryllium	NELAP	0.05	0.1		0.32	mg/Kg-dry	1	10/25/2013 17:18	93041
Boron	NELAP	1	2		10.2	mg/Kg-dry	1	10/25/2013 17:18	93041
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	10/25/2013 17:18	93041
Calcium	NELAP	2.5	5	S	136000	mg/Kg-dry	1	10/25/2013 17:18	93041
Chromium	NELAP	0.5	1		10.8	mg/Kg-dry	1	10/25/2013 17:18	93041
Cobalt	NELAP	0.5	1		3.58	mg/Kg-dry	1	10/25/2013 17:18	93041
Copper	NELAP	0.5	1		11.3	mg/Kg-dry	1	10/25/2013 17:18	93041
Iron	NELAP	1	2	BS	10300	mg/Kg-dry	1	10/25/2013 17:18	93041
Lead	NELAP	2	4		4.57	mg/Kg-dry	1	10/25/2013 17:18	93041
Magnesium	NELAP	0.5	1	S	63400	mg/Kg-dry	1	10/25/2013 17:18	93041
Manganese	NELAP	0.25	0.5		259	mg/Kg-dry	1	10/25/2013 17:18	93041
Nickel	NELAP	0.5	1		9.21	mg/Kg-dry	1	10/25/2013 17:18	93041
Potassium	NELAP	25	50	S	1430	mg/Kg-dry	5	10/28/2013 16:22	93041
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	10/25/2013 17:18	93041
Sodium	NELAP	2.5	5	S	1530	mg/Kg-dry	1	10/25/2013 17:18	93041
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	10/25/2013 17:18	93041

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-006

Client Sample ID: 2396-4-B05 DUP

Matrix: SOLID

Collection Date: 10/22/2013 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
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SW-846 3050B, 6010B, METALS BY ICP

Vanadium	NELAP	0.5	1		18.2	mg/Kg-dry	1	10/25/2013 17:18	93041
Zinc	NELAP	0.5	1		14.8	mg/Kg-dry	1	10/25/2013 17:18	93041

MS QC limits for K are not applicable due to high sample/spike ratio.

Sample result for Fe exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).

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

SW-846 3050B, 7010 METALS BY GFAA

Selenium	NELAP	0.33	0.566		< 0.566	mg/Kg-dry	1	10/28/2013 14:28	93057
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SW-846 7471B

Mercury	NELAP	0.003	0.011		0.015	mg/Kg-dry	1	10/25/2013 11:32	93029
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SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

1,2,4-Trichlorobenzene	NELAP	0.152	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
1,2-Dichlorobenzene	NELAP	0.182	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
1,3-Dichlorobenzene	NELAP	0.193	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
1,4-Dichlorobenzene	NELAP	0.182	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
2,4,5-Trichlorophenol	NELAP	0.109	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
2,4,6-Trichlorophenol	NELAP	0.144	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
2,4-Dichlorophenol	NELAP	0.139	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
2,4-Dimethylphenol	NELAP	0.146	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
2,4-Dinitrophenol	NELAP	0.123	1.15		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
2,4-Dinitrotoluene	NELAP	0.119	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
2,6-Dinitrotoluene	NELAP	0.124	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
2-Chloronaphthalene	NELAP	0.138	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
2-Chlorophenol	NELAP	0.146	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
2-Methylnaphthalene	NELAP	0.136	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
2-Nitroaniline	NELAP	0.104	1.15		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
2-Nitrophenol	NELAP	0.128	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
3,3'-Dichlorobenzidine	NELAP	0.229	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
3-Nitroaniline	NELAP	0.094	1.15		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
4,6-Dinitro-2-methylphenol	NELAP	0.124	1.15		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
4-Bromophenyl phenyl ether	NELAP	0.105	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
4-Chloro-3-methylphenol	NELAP	0.126	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
4-Chloroaniline	NELAP	0.139	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
4-Chlorophenyl phenyl ether	NELAP	0.114	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
4-Nitroaniline	NELAP	0.104	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
4-Nitrophenol	NELAP	0.112	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Acenaphthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Acenaphthylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Benzo(a)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Benzo(a)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Benzo(b)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Benzo(g,h,i)perylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Benzo(k)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Bis(2-chloroethoxy)methane	NELAP	0.134	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Bis(2-chloroethyl)ether	NELAP	0.163	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Bis(2-chloroisopropyl)ether	NELAP	0.131	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Bis(2-ethylhexyl)phthalate	NELAP	0.134	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-006

Client Sample ID: 2396-4-B05 DUP

Matrix: SOLID

Collection Date: 10/22/2013 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Butyl benzyl phthalate	NELAP	0.116	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Carbazole		0.14	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Chrysene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Dibenzo(a,h)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Dibenzofuran	NELAP	0.144	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Diethyl phthalate	NELAP	0.11	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Dimethyl phthalate	NELAP	0.104	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Di-n-butyl phthalate	NELAP	0.118	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Di-n-octyl phthalate	NELAP	0.119	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Fluorene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Hexachlorobenzene	NELAP	0.112	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Hexachlorobutadiene	NELAP	0.178	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Hexachlorocyclopentadiene	NELAP	0.117	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Hexachloroethane	NELAP	0.191	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Isophorone	NELAP	0.135	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
m,p-Cresol	NELAP	0.144	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Naphthalene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Nitrobenzene	NELAP	0.143	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
N-Nitroso-di-n-propylamine	NELAP	0.126	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
N-Nitrosodiphenylamine	NELAP	0.105	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
o-Cresol	NELAP	0.135	0.573		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Pentachlorophenol	NELAP	0.757	2.29		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Phenanthrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Phenol	NELAP	0.133	0.401		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	10/25/2013 22:45	93033
Surr: 2,4,6-Tribromophenol		0	32.7-130		73.3	%REC	1	10/25/2013 22:45	93033
Surr: 2-Fluorobiphenyl		0	34.1-116		71.5	%REC	1	10/25/2013 22:45	93033
Surr: 2-Fluorophenol		0	30.5-99		66.7	%REC	1	10/25/2013 22:45	93033
Surr: Nitrobenzene-d5		0	34.1-101		64.4	%REC	1	10/25/2013 22:45	93033
Surr: Phenol-d5		0	34.9-110		79.8	%REC	1	10/25/2013 22:45	93033
Surr: p-Terphenyl-d14		0	41.7-124		79.8	%REC	1	10/25/2013 22:45	93033
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
1,1,2,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
2-Butanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
2-Hexanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
4-Methyl-2-pentanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Acetone	NELAP	0.0074	0.037	J	0.023	mg/Kg-dry	1	10/24/2013 20:23	93073
Benzene	NELAP	0.0004	0.001		0.002	mg/Kg-dry	1	10/24/2013 20:23	93073

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-006

Client Sample ID: 2396-4-B05 DUP

Matrix: SOLID

Collection Date: 10/22/2013 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Bromomethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Carbon disulfide	NELAP	0.0022	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Chlorobenzene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Chloroethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Chloromethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Ethylbenzene	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	10/24/2013 20:23	93073
m,p-Xylenes	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	10/24/2013 20:23	93073
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Methylene chloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
o-Xylene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/24/2013 20:23	93073
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Toluene	NELAP	0.0007	0.004		0.004	mg/Kg-dry	1	10/24/2013 20:23	93073
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Vinyl acetate	NELAP	0.0148	0.037		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/24/2013 20:23	93073
Xylenes, Total	NELAP	0.0007	0.004	J	0.003	mg/Kg-dry	1	10/24/2013 20:23	93073
Surr: 1,2-Dichloroethane-d4		0	72.2-131		110.9	%REC	1	10/24/2013 20:23	93073
Surr: 4-Bromofluorobenzene		0	82.1-116		106.2	%REC	1	10/24/2013 20:23	93073
Surr: Dibromofluoromethane		0	77.7-120		106.3	%REC	1	10/24/2013 20:23	93073
Surr: Toluene-d8		0	86-116		92.3	%REC	1	10/24/2013 20:23	93073

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-007

Client Sample ID: 2396-4-B06

Matrix: SOLID

Collection Date: 10/22/2013 11:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		15.3	%	1	10/24/2013 16:27	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		84.7	%	1	10/24/2013 16:27	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.95		1	10/24/2013 20:05	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 9:50	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.146	mg/L	1	10/28/2013 16:43	93085
Beryllium	NELAP	0.0003	0.001	J	0.0004	mg/L	1	10/28/2013 16:43	93085
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 16:43	93085
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 16:43	93085
Chromium	NELAP	0.004	0.01		0.0238	mg/L	1	10/28/2013 16:43	93085
Cobalt	NELAP	0.0022	0.01	J	0.0028	mg/L	1	10/28/2013 16:43	93085
Iron	NELAP	0.007	0.02	X	20.2	mg/L	1	10/28/2013 16:43	93085
Lead	NELAP	0.006	0.007	J	0.0069	mg/L	1	10/28/2013 16:43	93085
Manganese	NELAP	0.0016	0.005		0.0892	mg/L	1	10/28/2013 16:43	93085
Nickel	NELAP	0.0033	0.01		0.0155	mg/L	1	10/28/2013 16:43	93085
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 16:43	93085
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 16:43	93085
Zinc	NELAP	0.0021	0.01		0.0503	mg/L	1	10/28/2013 16:43	93085
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	10/29/2013 22:00	93087
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 11:00	93087
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 12:57	93092
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	10/28/2013 22:33	93063
Arsenic	NELAP	1.2	2.4		11.2	mg/Kg-dry	1	10/25/2013 17:54	93041
Barium	NELAP	0.24	0.48		164	mg/Kg-dry	1	10/25/2013 17:54	93041
Beryllium	NELAP	0.05	0.1		1.03	mg/Kg-dry	1	10/25/2013 17:54	93041
Boron	NELAP	0.96	1.92		6.62	mg/Kg-dry	1	10/25/2013 17:54	93041
Cadmium	NELAP	0.1	0.19		< 0.19	mg/Kg-dry	1	10/25/2013 17:54	93041
Calcium	NELAP	2.4	4.81		4800	mg/Kg-dry	1	10/25/2013 17:54	93041
Chromium	NELAP	0.48	0.96	X	31	mg/Kg-dry	1	10/25/2013 17:54	93041
Cobalt	NELAP	0.48	0.96		9.86	mg/Kg-dry	1	10/25/2013 17:54	93041
Copper	NELAP	0.48	0.96		25	mg/Kg-dry	1	10/25/2013 17:54	93041
Iron	NELAP	0.96	1.92	BX	29600	mg/Kg-dry	1	10/25/2013 17:54	93041
Lead	NELAP	1.92	3.85		33.7	mg/Kg-dry	1	10/25/2013 17:54	93041
Magnesium	NELAP	0.48	0.96		4910	mg/Kg-dry	1	10/25/2013 17:54	93041
Manganese	NELAP	0.24	0.48	X	776	mg/Kg-dry	1	10/25/2013 17:54	93041
Nickel	NELAP	0.48	0.96		23.6	mg/Kg-dry	1	10/25/2013 17:54	93041
Potassium	NELAP	4.81	9.62		1690	mg/Kg-dry	1	10/25/2013 17:54	93041
Silver	NELAP	0.48	0.53		< 0.53	mg/Kg-dry	1	10/28/2013 16:40	93041
Sodium	NELAP	2.4	4.81		2550	mg/Kg-dry	1	10/25/2013 17:54	93041
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	10/25/2013 17:54	93041

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-007

Client Sample ID: 2396-4-B06

Matrix: SOLID

Collection Date: 10/22/2013 11:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
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SW-846 3050B, 6010B, METALS BY ICP

Vanadium	NELAP	0.48	0.96		51.6	mg/Kg-dry	1	10/25/2013 17:54	93041
Zinc	NELAP	0.48	0.96		61.9	mg/Kg-dry	1	10/25/2013 17:54	93041

Sample result for Fe exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).

SW-846 3050B, 7010 METALS BY GFAA

Selenium	NELAP	0.324	0.556		< 0.556	mg/Kg-dry	1	10/28/2013 14:32	93057
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SW-846 7471B

Mercury	NELAP	0.003	0.012		0.043	mg/Kg-dry	1	10/25/2013 11:43	93029
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SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

1,2,4-Trichlorobenzene	NELAP	0.159	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
1,2-Dichlorobenzene	NELAP	0.19	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
1,3-Dichlorobenzene	NELAP	0.201	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
1,4-Dichlorobenzene	NELAP	0.19	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
2,4,5-Trichlorophenol	NELAP	0.114	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
2,4,6-Trichlorophenol	NELAP	0.151	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
2,4-Dichlorophenol	NELAP	0.145	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
2,4-Dimethylphenol	NELAP	0.152	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
2,4-Dinitrophenol	NELAP	0.128	1.19		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
2,4-Dinitrotoluene	NELAP	0.124	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
2,6-Dinitrotoluene	NELAP	0.129	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
2-Chloronaphthalene	NELAP	0.143	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
2-Chlorophenol	NELAP	0.152	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
2-Methylnaphthalene	NELAP	0.142	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
2-Nitroaniline	NELAP	0.109	1.19		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
2-Nitrophenol	NELAP	0.134	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
3,3'-Dichlorobenzidine	NELAP	0.239	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
3-Nitroaniline	NELAP	0.098	1.19		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
4,6-Dinitro-2-methylphenol	NELAP	0.129	1.19		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
4-Bromophenyl phenyl ether	NELAP	0.11	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
4-Chloro-3-methylphenol	NELAP	0.131	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
4-Chloroaniline	NELAP	0.145	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
4-Chlorophenyl phenyl ether	NELAP	0.118	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
4-Nitroaniline	NELAP	0.109	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
4-Nitrophenol	NELAP	0.117	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Acenaphthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Acenaphthylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Benzo(a)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Benzo(a)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Benzo(b)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Benzo(g,h,i)perylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Benzo(k)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Bis(2-chloroethoxy)methane	NELAP	0.14	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Bis(2-chloroethyl)ether	NELAP	0.17	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Bis(2-chloroisopropyl)ether	NELAP	0.136	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Bis(2-ethylhexyl)phthalate	NELAP	0.14	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Butyl benzyl phthalate	NELAP	0.121	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Carbazole		0.146	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-007

Client Sample ID: 2396-4-B06

Matrix: SOLID

Collection Date: 10/22/2013 11:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Dibenzo(a,h)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Dibenzofuran	NELAP	0.151	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Diethyl phthalate	NELAP	0.115	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Dimethyl phthalate	NELAP	0.109	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Di-n-butyl phthalate	NELAP	0.123	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Di-n-octyl phthalate	NELAP	0.124	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Fluorene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Hexachlorobenzene	NELAP	0.117	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Hexachlorobutadiene	NELAP	0.185	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Hexachlorocyclopentadiene	NELAP	0.122	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Hexachloroethane	NELAP	0.2	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Isophorone	NELAP	0.141	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
m,p-Cresol	NELAP	0.151	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Naphthalene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Nitrobenzene	NELAP	0.149	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
N-Nitroso-di-n-propylamine	NELAP	0.131	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
N-Nitrosodiphenylamine	NELAP	0.11	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
o-Cresol	NELAP	0.141	0.597		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Pentachlorophenol	NELAP	0.789	2.39		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Phenanthrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Phenol	NELAP	0.139	0.418		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	10/27/2013 21:10	93033
Surr: 2,4,6-Tribromophenol		0	32.7-130		99	%REC	1	10/27/2013 21:10	93033
Surr: 2-Fluorobiphenyl		0	34.1-116		65.8	%REC	1	10/27/2013 21:10	93033
Surr: 2-Fluorophenol		0	30.5-99		71.4	%REC	1	10/27/2013 21:10	93033
Surr: Nitrobenzene-d5		0	34.1-101		73.5	%REC	1	10/27/2013 21:10	93033
Surr: Phenol-d5		0	34.9-110		79.5	%REC	1	10/27/2013 21:10	93033
Surr: p-Terphenyl-d14		0	41.7-124		79.2	%REC	1	10/27/2013 21:10	93033
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
1,1,2,2-Tetrachloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
1,1,2-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
1,1-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
1,1-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
1,2-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
1,2-Dichloropropane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
1,3-Dichloropropene, Total		0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
2-Butanone	NELAP	0.0088	0.044		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
2-Hexanone	NELAP	0.0088	0.044		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
4-Methyl-2-pentanone	NELAP	0.0088	0.044		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Acetone	NELAP	0.0088	0.044	J	0.029	mg/Kg-dry	1	10/24/2013 20:49	93073
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Bromodichloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Bromoform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-007

Client Sample ID: 2396-4-B06

Matrix: SOLID

Collection Date: 10/22/2013 11:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Carbon disulfide	NELAP	0.0027	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Carbon tetrachloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Chlorobenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Chloroethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Chloroform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Chloromethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
cis-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
cis-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Dibromochloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Ethylbenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
m,p-Xylenes	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Methylene chloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
o-Xylene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Styrene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Tetrachloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Toluene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
trans-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
trans-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Trichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Vinyl acetate	NELAP	0.0177	0.044		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Xylenes, Total	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/24/2013 20:49	93073
Surr: 1,2-Dichloroethane-d4		0	72.2-131		113.5	%REC	1	10/24/2013 20:49	93073
Surr: 4-Bromofluorobenzene		0	82.1-116		106.7	%REC	1	10/24/2013 20:49	93073
Surr: Dibromofluoromethane		0	77.7-120		106.5	%REC	1	10/24/2013 20:49	93073
Surr: Toluene-d8		0	86-116		91.3	%REC	1	10/24/2013 20:49	93073

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-008

Client Sample ID: 2396-4-B07

Matrix: SOLID

Collection Date: 10/22/2013 11:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		19.7	%	1	10/24/2013 16:28	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		80.3	%	1	10/24/2013 16:28	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.66		1	10/24/2013 20:08	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 9:54	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.142	mg/L	1	10/28/2013 16:46	93085
Beryllium	NELAP	0.0003	0.001	J	0.0003	mg/L	1	10/28/2013 16:46	93085
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 16:46	93085
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 16:46	93085
Chromium	NELAP	0.004	0.01		0.0173	mg/L	1	10/28/2013 16:46	93085
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/28/2013 16:46	93085
Iron	NELAP	0.007	0.02	X	13.1	mg/L	1	10/28/2013 16:46	93085
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 16:46	93085
Manganese	NELAP	0.0016	0.005		0.0341	mg/L	1	10/28/2013 16:46	93085
Nickel	NELAP	0.0033	0.01	J	0.0095	mg/L	1	10/28/2013 16:46	93085
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 16:46	93085
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 16:46	93085
Zinc	NELAP	0.0021	0.01		0.0498	mg/L	1	10/28/2013 16:46	93085
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	10/29/2013 22:03	93087
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 11:03	93087
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 13:00	93092
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/28/2013 22:40	93063
Arsenic	NELAP	1.23	2.45		4.83	mg/Kg-dry	1	10/25/2013 18:00	93041
Barium	NELAP	0.25	0.49		171	mg/Kg-dry	1	10/25/2013 18:00	93041
Beryllium	NELAP	0.05	0.1		0.88	mg/Kg-dry	1	10/25/2013 18:00	93041
Boron	NELAP	0.98	1.96		6.21	mg/Kg-dry	1	10/25/2013 18:00	93041
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	10/25/2013 18:00	93041
Calcium	NELAP	2.45	4.9		5490	mg/Kg-dry	1	10/25/2013 18:00	93041
Chromium	NELAP	0.49	0.98	X	24.9	mg/Kg-dry	1	10/25/2013 18:00	93041
Cobalt	NELAP	0.49	0.98		4.93	mg/Kg-dry	1	10/25/2013 18:00	93041
Copper	NELAP	0.49	0.98		19	mg/Kg-dry	1	10/25/2013 18:00	93041
Iron	NELAP	0.98	1.96	BX	22500	mg/Kg-dry	1	10/25/2013 18:00	93041
Lead	NELAP	1.96	3.92		12.5	mg/Kg-dry	1	10/25/2013 18:00	93041
Magnesium	NELAP	0.49	0.98		4000	mg/Kg-dry	1	10/25/2013 18:00	93041
Manganese	NELAP	0.25	0.49		179	mg/Kg-dry	1	10/25/2013 18:00	93041
Nickel	NELAP	0.49	0.98		17.3	mg/Kg-dry	1	10/25/2013 18:00	93041
Potassium	NELAP	4.9	9.8		1480	mg/Kg-dry	1	10/25/2013 18:00	93041
Silver	NELAP	0.49	0.54		< 0.54	mg/Kg-dry	1	10/25/2013 18:00	93041
Sodium	NELAP	2.45	4.9		1510	mg/Kg-dry	1	10/25/2013 18:00	93041
Thallium	NELAP	2.45	2.55		< 2.55	mg/Kg-dry	1	10/25/2013 18:00	93041

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-008

Client Sample ID: 2396-4-B07

Matrix: SOLID

Collection Date: 10/22/2013 11:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.49	0.98		40.2	mg/Kg-dry	1	10/25/2013 18:00	93041
Zinc	NELAP	0.49	0.98		61.2	mg/Kg-dry	1	10/25/2013 18:00	93041
<i>Sample result for Fe exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.324	0.556		< 0.556	mg/Kg-dry	1	10/28/2013 14:42	93057
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.06	mg/Kg-dry	1	10/25/2013 11:46	93029
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.165	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
1,2-Dichlorobenzene	NELAP	0.197	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
1,3-Dichlorobenzene	NELAP	0.208	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
1,4-Dichlorobenzene	NELAP	0.197	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
2,4,5-Trichlorophenol	NELAP	0.118	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
2,4,6-Trichlorophenol	NELAP	0.156	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
2,4-Dichlorophenol	NELAP	0.15	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
2,4-Dimethylphenol	NELAP	0.157	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
2,4-Dinitrophenol	NELAP	0.133	1.24		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
2,4-Dinitrotoluene	NELAP	0.129	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
2,6-Dinitrotoluene	NELAP	0.134	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
2-Chloronaphthalene	NELAP	0.149	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
2-Chlorophenol	NELAP	0.157	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
2-Methylnaphthalene	NELAP	0.148	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
2-Nitroaniline	NELAP	0.113	1.24		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
2-Nitrophenol	NELAP	0.139	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
3,3'-Dichlorobenzidine	NELAP	0.248	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
3-Nitroaniline	NELAP	0.102	1.24		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
4,6-Dinitro-2-methylphenol	NELAP	0.134	1.24		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
4-Bromophenyl phenyl ether	NELAP	0.114	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
4-Chloro-3-methylphenol	NELAP	0.136	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
4-Chloroaniline	NELAP	0.15	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
4-Chlorophenyl phenyl ether	NELAP	0.123	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
4-Nitroaniline	NELAP	0.113	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
4-Nitrophenol	NELAP	0.121	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Acenaphthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Acenaphthylene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Benzo(a)anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Benzo(a)pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Benzo(b)fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Benzo(g,h,i)perylene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Benzo(k)fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Bis(2-chloroethoxy)methane	NELAP	0.145	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Bis(2-chloroethyl)ether	NELAP	0.176	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Bis(2-chloroisopropyl)ether	NELAP	0.141	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Bis(2-ethylhexyl)phthalate	NELAP	0.145	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Butyl benzyl phthalate	NELAP	0.125	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Carbazole		0.151	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-008

Client Sample ID: 2396-4-B07

Matrix: SOLID

Collection Date: 10/22/2013 11:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Dibenzo(a,h)anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Dibenzofuran	NELAP	0.156	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Diethyl phthalate	NELAP	0.119	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Dimethyl phthalate	NELAP	0.113	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Di-n-butyl phthalate	NELAP	0.128	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Di-n-octyl phthalate	NELAP	0.129	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Fluorene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Hexachlorobenzene	NELAP	0.121	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Hexachlorobutadiene	NELAP	0.192	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Hexachlorocyclopentadiene	NELAP	0.126	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Hexachloroethane	NELAP	0.207	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Indeno(1,2,3-cd)pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Isophorone	NELAP	0.146	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
m,p-Cresol	NELAP	0.156	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Naphthalene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Nitrobenzene	NELAP	0.155	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
N-Nitroso-di-n-propylamine	NELAP	0.136	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
N-Nitrosodiphenylamine	NELAP	0.114	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
o-Cresol	NELAP	0.146	0.62		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Pentachlorophenol	NELAP	0.818	2.48		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Phenanthrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Phenol	NELAP	0.144	0.434		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	10/25/2013 21:03	93033
Surr: 2,4,6-Tribromophenol		0	32.7-130		69.5	%REC	1	10/25/2013 21:03	93033
Surr: 2-Fluorobiphenyl		0	34.1-116		56.5	%REC	1	10/25/2013 21:03	93033
Surr: 2-Fluorophenol		0	30.5-99		57.6	%REC	1	10/25/2013 21:03	93033
Surr: Nitrobenzene-d5		0	34.1-101		56.7	%REC	1	10/25/2013 21:03	93033
Surr: Phenol-d5		0	34.9-110		72.8	%REC	1	10/25/2013 21:03	93033
Surr: p-Terphenyl-d14		0	41.7-124		77	%REC	1	10/25/2013 21:03	93033
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
1,1,2,2-Tetrachloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
1,1,2-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
1,1-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
1,1-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
1,2-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
1,2-Dichloropropane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
1,3-Dichloropropene, Total		0.001	0.004		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
2-Butanone	NELAP	0.0098	0.049		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
2-Hexanone	NELAP	0.0098	0.049		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
4-Methyl-2-pentanone	NELAP	0.0098	0.049		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Acetone	NELAP	0.0098	0.049	J	0.031	mg/Kg-dry	1	10/24/2013 21:16	93073
Benzene	NELAP	0.0005	0.001		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Bromodichloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Bromoform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-008

Client Sample ID: 2396-4-B07

Matrix: SOLID

Collection Date: 10/22/2013 11:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Carbon disulfide	NELAP	0.0029	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Carbon tetrachloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Chlorobenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Chloroethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Chloroform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Chloromethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
cis-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
cis-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Dibromochloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Ethylbenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
m,p-Xylenes	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Methylene chloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
o-Xylene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Styrene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Tetrachloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Toluene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
trans-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
trans-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Trichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Vinyl acetate	NELAP	0.0196	0.049		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Xylenes, Total	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/24/2013 21:16	93073
Surr: 1,2-Dichloroethane-d4		0	72.2-131		111.2	%REC	1	10/24/2013 21:16	93073
Surr: 4-Bromofluorobenzene		0	82.1-116		103.7	%REC	1	10/24/2013 21:16	93073
Surr: Dibromofluoromethane		0	77.7-120		106.2	%REC	1	10/24/2013 21:16	93073
Surr: Toluene-d8		0	86-116		92.2	%REC	1	10/24/2013 21:16	93073



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-009

Client Sample ID: 2396-4-B08

Matrix: SOLID

Collection Date: 10/22/2013 11:25

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	10/24/2013 16:28	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		84.4	%	1	10/24/2013 16:28	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.65		1	10/24/2013 20:10	R183241
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	10/31/2013 9:58	93226
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.138	mg/L	1	10/28/2013 16:50	93085
Beryllium	NELAP	0.0003	0.001	J	0.0004	mg/L	1	10/28/2013 16:50	93085
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 16:50	93085
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 16:50	93085
Chromium	NELAP	0.004	0.01		0.0221	mg/L	1	10/28/2013 16:50	93085
Cobalt	NELAP	0.0022	0.01	J	0.003	mg/L	1	10/28/2013 16:50	93085
Iron	NELAP	0.007	0.02	X	14.5	mg/L	1	10/28/2013 16:50	93085
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 16:50	93085
Manganese	NELAP	0.0016	0.005		0.0848	mg/L	1	10/28/2013 16:50	93085
Nickel	NELAP	0.0033	0.01		0.0153	mg/L	1	10/28/2013 16:50	93085
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 16:50	93085
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 16:50	93085
Zinc	NELAP	0.0021	0.01		0.0412	mg/L	1	10/28/2013 16:50	93085
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	10/29/2013 22:07	93087
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 11:07	93087
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 13:02	93092
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/28/2013 22:46	93063
Arsenic	NELAP	1.23	2.45		8.58	mg/Kg-dry	1	10/25/2013 18:06	93041
Barium	NELAP	0.25	0.49		142	mg/Kg-dry	1	10/25/2013 18:06	93041
Beryllium	NELAP	0.05	0.1		0.77	mg/Kg-dry	1	10/25/2013 18:06	93041
Boron	NELAP	0.98	1.96		6.14	mg/Kg-dry	1	10/25/2013 18:06	93041
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	10/25/2013 18:06	93041
Calcium	NELAP	2.45	4.9		3310	mg/Kg-dry	1	10/25/2013 18:06	93041
Chromium	NELAP	0.49	0.98	X	23.9	mg/Kg-dry	1	10/25/2013 18:06	93041
Cobalt	NELAP	0.49	0.98		12	mg/Kg-dry	1	10/25/2013 18:06	93041
Copper	NELAP	0.49	0.98		18.7	mg/Kg-dry	1	10/25/2013 18:06	93041
Iron	NELAP	0.98	1.96	BX	20100	mg/Kg-dry	1	10/25/2013 18:06	93041
Lead	NELAP	1.96	3.92		14.9	mg/Kg-dry	1	10/25/2013 18:06	93041
Magnesium	NELAP	0.49	0.98		3810	mg/Kg-dry	1	10/25/2013 18:06	93041
Manganese	NELAP	0.25	0.49		436	mg/Kg-dry	1	10/25/2013 18:06	93041
Nickel	NELAP	0.49	0.98		22.2	mg/Kg-dry	1	10/25/2013 18:06	93041
Potassium	NELAP	4.9	9.8		1160	mg/Kg-dry	1	10/25/2013 18:06	93041
Silver	NELAP	0.49	0.54		< 0.54	mg/Kg-dry	1	10/25/2013 18:06	93041
Sodium	NELAP	2.45	4.9		1050	mg/Kg-dry	1	10/25/2013 18:06	93041
Thallium	NELAP	2.45	2.55		< 2.55	mg/Kg-dry	1	10/25/2013 18:06	93041

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-009

Client Sample ID: 2396-4-B08

Matrix: SOLID

Collection Date: 10/22/2013 11:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.49	0.98		50.9	mg/Kg-dry	1	10/25/2013 18:06	93041
Zinc	NELAP	0.49	0.98		41	mg/Kg-dry	1	10/25/2013 18:06	93041
<i>Sample result for Fe exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588		< 0.588	mg/Kg-dry	1	10/28/2013 14:46	93057
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.031	mg/Kg-dry	1	10/25/2013 11:48	93029
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.157	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
1,2-Dichlorobenzene	NELAP	0.187	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
1,3-Dichlorobenzene	NELAP	0.198	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
1,4-Dichlorobenzene	NELAP	0.187	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
2,4,5-Trichlorophenol	NELAP	0.112	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
2,4,6-Trichlorophenol	NELAP	0.148	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
2,4-Dichlorophenol	NELAP	0.143	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
2,4-Dimethylphenol	NELAP	0.15	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
2,4-Dinitrophenol	NELAP	0.126	1.18		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
2,4-Dinitrotoluene	NELAP	0.123	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
2,6-Dinitrotoluene	NELAP	0.127	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
2-Chloronaphthalene	NELAP	0.141	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
2-Chlorophenol	NELAP	0.15	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
2-Methylnaphthalene	NELAP	0.14	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
2-Nitroaniline	NELAP	0.107	1.18		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
2-Nitrophenol	NELAP	0.132	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
3,3'-Dichlorobenzidine	NELAP	0.236	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
3-Nitroaniline	NELAP	0.097	1.18		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
4,6-Dinitro-2-methylphenol	NELAP	0.127	1.18		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
4-Bromophenyl phenyl ether	NELAP	0.108	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
4-Chloro-3-methylphenol	NELAP	0.13	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
4-Chloroaniline	NELAP	0.143	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
4-Chlorophenyl phenyl ether	NELAP	0.117	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
4-Nitroaniline	NELAP	0.107	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
4-Nitrophenol	NELAP	0.115	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Acenaphthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Acenaphthylene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Anthracene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Benzo(a)anthracene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Benzo(a)pyrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Benzo(b)fluoranthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Benzo(g,h,i)perylene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Benzo(k)fluoranthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Bis(2-chloroethoxy)methane	NELAP	0.138	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Bis(2-chloroethyl)ether	NELAP	0.167	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Bis(2-chloroisopropyl)ether	NELAP	0.134	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Bis(2-ethylhexyl)phthalate	NELAP	0.138	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Butyl benzyl phthalate	NELAP	0.119	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Carbazole		0.144	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-009

Client Sample ID: 2396-4-B08

Matrix: SOLID

Collection Date: 10/22/2013 11:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Dibenzo(a,h)anthracene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Dibenzofuran	NELAP	0.148	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Diethyl phthalate	NELAP	0.113	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Dimethyl phthalate	NELAP	0.107	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Di-n-butyl phthalate	NELAP	0.121	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Di-n-octyl phthalate	NELAP	0.123	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Fluoranthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Fluorene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Hexachlorobenzene	NELAP	0.115	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Hexachlorobutadiene	NELAP	0.183	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Hexachlorocyclopentadiene	NELAP	0.12	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Hexachloroethane	NELAP	0.197	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Isophorone	NELAP	0.139	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
m,p-Cresol	NELAP	0.148	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Naphthalene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Nitrobenzene	NELAP	0.147	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
N-Nitroso-di-n-propylamine	NELAP	0.13	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
N-Nitrosodiphenylamine	NELAP	0.108	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
o-Cresol	NELAP	0.139	0.589		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Pentachlorophenol	NELAP	0.778	2.36		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Phenanthrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Phenol	NELAP	0.137	0.412		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Pyrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	10/25/2013 21:37	93033
Surr: 2,4,6-Tribromophenol		0	32.7-130		74.9	%REC	1	10/25/2013 21:37	93033
Surr: 2-Fluorobiphenyl		0	34.1-116		68	%REC	1	10/25/2013 21:37	93033
Surr: 2-Fluorophenol		0	30.5-99		63.8	%REC	1	10/25/2013 21:37	93033
Surr: Nitrobenzene-d5		0	34.1-101		61.7	%REC	1	10/25/2013 21:37	93033
Surr: Phenol-d5		0	34.9-110		77.7	%REC	1	10/25/2013 21:37	93033
Surr: p-Terphenyl-d14		0	41.7-124		80.8	%REC	1	10/25/2013 21:37	93033
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
1,1,1,2-Tetrachloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
1,1,2-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
1,1-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
1,1-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
1,2-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
1,2-Dichloropropane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
1,3-Dichloropropene, Total		0.0009	0.004		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
2-Butanone	NELAP	0.009	0.045		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
2-Hexanone	NELAP	0.009	0.045		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
4-Methyl-2-pentanone	NELAP	0.009	0.045		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Acetone	NELAP	0.009	0.045	J	0.026	mg/Kg-dry	1	10/25/2013 14:12	93117
Benzene	NELAP	0.0005	0.001		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Bromodichloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Bromoform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-009

Client Sample ID: 2396-4-B08

Matrix: SOLID

Collection Date: 10/22/2013 11:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Carbon disulfide	NELAP	0.0027	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Carbon tetrachloride	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Chlorobenzene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Chloroethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Chloroform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Chloromethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
cis-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
cis-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Dibromochloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Ethylbenzene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
m,p-Xylenes	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Methylene chloride	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
o-Xylene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Styrene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Tetrachloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Toluene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
trans-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
trans-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Trichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Vinyl acetate	NELAP	0.018	0.045		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Xylenes, Total	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/25/2013 14:12	93117
Surr: 1,2-Dichloroethane-d4		0	72.2-131		110.8	%REC	1	10/25/2013 14:12	93117
Surr: 4-Bromofluorobenzene		0	82.1-116		115.6	%REC	1	10/25/2013 14:12	93117
Surr: Dibromofluoromethane		0	77.7-120		104.5	%REC	1	10/25/2013 14:12	93117
Surr: Toluene-d8		0	86-116		91	%REC	1	10/25/2013 14:12	93117



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-010

Client Sample ID: 2396-4-B09

Matrix: SOLID

Collection Date: 10/22/2013 11:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		10.8	%	1	10/24/2013 16:28	R183245
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		89.2	%	1	10/24/2013 16:28	R183245
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.8		1	10/24/2013 20:13	R183241
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.027	mg/L	1	10/28/2013 16:54	93085
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/28/2013 16:54	93085
Boron	NELAP	1	2		< 2	mg/L	1	10/28/2013 16:54	93085
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/28/2013 16:54	93085
Chromium	NELAP	0.004	0.01		< 0.01	mg/L	1	10/28/2013 16:54	93085
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/28/2013 16:54	93085
Iron	NELAP	0.007	0.02		2.49	mg/L	1	10/28/2013 16:54	93085
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/28/2013 16:54	93085
Manganese	NELAP	0.0016	0.005		0.0107	mg/L	1	10/28/2013 16:54	93085
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	10/28/2013 16:54	93085
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/28/2013 16:54	93085
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/28/2013 16:54	93085
Zinc	NELAP	0.0021	0.01	J	0.0099	mg/L	1	10/28/2013 16:54	93085
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	10/29/2013 22:11	93087
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/28/2013 11:10	93087
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/28/2013 13:04	93092
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.45	4.72		< 4.72	mg/Kg-dry	1	10/28/2013 23:04	93063
Arsenic	NELAP	1.2	2.4		7.88	mg/Kg-dry	1	10/25/2013 18:12	93041
Barium	NELAP	0.24	0.48		134	mg/Kg-dry	1	10/25/2013 18:12	93041
Beryllium	NELAP	0.05	0.1		0.74	mg/Kg-dry	1	10/25/2013 18:12	93041
Boron	NELAP	0.96	1.92		6.78	mg/Kg-dry	1	10/25/2013 18:12	93041
Cadmium	NELAP	0.1	0.19		< 0.19	mg/Kg-dry	1	10/25/2013 18:12	93041
Calcium	NELAP	2.4	4.81		7840	mg/Kg-dry	1	10/25/2013 18:12	93041
Chromium	NELAP	0.48	0.96	X	23.5	mg/Kg-dry	1	10/25/2013 18:12	93041
Cobalt	NELAP	0.48	0.96		6.07	mg/Kg-dry	1	10/25/2013 18:12	93041
Copper	NELAP	0.48	0.96		16.9	mg/Kg-dry	1	10/25/2013 18:12	93041
Iron	NELAP	0.96	1.92	BX	24000	mg/Kg-dry	1	10/25/2013 18:12	93041
Lead	NELAP	1.92	3.85		10.5	mg/Kg-dry	1	10/25/2013 18:12	93041
Magnesium	NELAP	0.48	0.96		6090	mg/Kg-dry	1	10/25/2013 18:12	93041
Manganese	NELAP	0.24	0.48		445	mg/Kg-dry	1	10/25/2013 18:12	93041
Nickel	NELAP	0.48	0.96		24.2	mg/Kg-dry	1	10/25/2013 18:12	93041
Potassium	NELAP	4.81	9.62		1550	mg/Kg-dry	1	10/25/2013 18:12	93041
Silver	NELAP	0.48	0.53		< 0.53	mg/Kg-dry	1	10/25/2013 18:12	93041
Sodium	NELAP	2.4	4.81		95.9	mg/Kg-dry	1	10/25/2013 18:12	93041
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	10/25/2013 18:12	93041
Vanadium	NELAP	0.48	0.96		40.6	mg/Kg-dry	1	10/25/2013 18:12	93041
Zinc	NELAP	0.48	0.96		44.4	mg/Kg-dry	1	10/25/2013 18:12	93041

Sample result for Fe exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-010

Client Sample ID: 2396-4-B09

Matrix: SOLID

Collection Date: 10/22/2013 11:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.324	0.556		< 0.556	mg/Kg-dry	1	10/28/2013 14:49	93057
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.016	mg/Kg-dry	1	10/25/2013 11:50	93029
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.147	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
1,2-Dichlorobenzene	NELAP	0.176	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
1,3-Dichlorobenzene	NELAP	0.186	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
1,4-Dichlorobenzene	NELAP	0.176	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
2,4,5-Trichlorophenol	NELAP	0.105	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
2,4,6-Trichlorophenol	NELAP	0.14	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
2,4-Dichlorophenol	NELAP	0.134	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
2,4-Dimethylphenol	NELAP	0.141	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
2,4-Dinitrophenol	NELAP	0.119	1.11		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
2,4-Dinitrotoluene	NELAP	0.115	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
2,6-Dinitrotoluene	NELAP	0.12	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
2-Chloronaphthalene	NELAP	0.133	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
2-Chlorophenol	NELAP	0.141	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
2-Methylnaphthalene	NELAP	0.132	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
2-Nitroaniline	NELAP	0.101	1.11		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
2-Nitrophenol	NELAP	0.124	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
3,3'-Dichlorobenzidine	NELAP	0.222	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
3-Nitroaniline	NELAP	0.091	1.11		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
4,6-Dinitro-2-methylphenol	NELAP	0.12	1.11		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
4-Bromophenyl phenyl ether	NELAP	0.102	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
4-Chloro-3-methylphenol	NELAP	0.122	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
4-Chloroaniline	NELAP	0.134	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
4-Chlorophenyl phenyl ether	NELAP	0.11	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
4-Nitroaniline	NELAP	0.101	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
4-Nitrophenol	NELAP	0.109	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Acenaphthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Acenaphthylene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Anthracene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Benzo(a)anthracene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Benzo(a)pyrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Benzo(b)fluoranthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Benzo(g,h,i)perylene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Benzo(k)fluoranthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Bis(2-chloroethoxy)methane	NELAP	0.13	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Bis(2-chloroethyl)ether	NELAP	0.157	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Bis(2-chloroisopropyl)ether	NELAP	0.126	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Bis(2-ethylhexyl)phthalate	NELAP	0.13	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Butyl benzyl phthalate	NELAP	0.112	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Carbazole		0.135	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Chrysene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Dibenzo(a,h)anthracene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Dibenzofuran	NELAP	0.14	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Diethyl phthalate	NELAP	0.106	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-010

Client Sample ID: 2396-4-B09

Matrix: SOLID

Collection Date: 10/22/2013 11:10

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	0.101	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Di-n-butyl phthalate	NELAP	0.114	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Di-n-octyl phthalate	NELAP	0.115	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Fluoranthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Fluorene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Hexachlorobenzene	NELAP	0.109	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Hexachlorobutadiene	NELAP	0.172	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Hexachlorocyclopentadiene	NELAP	0.113	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Hexachloroethane	NELAP	0.185	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Isophorone	NELAP	0.131	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
m,p-Cresol	NELAP	0.14	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Naphthalene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Nitrobenzene	NELAP	0.138	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
N-Nitroso-di-n-propylamine	NELAP	0.122	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
N-Nitrosodiphenylamine	NELAP	0.102	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
o-Cresol	NELAP	0.131	0.554		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Pentachlorophenol	NELAP	0.731	2.22		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Phenanthrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Phenol	NELAP	0.128	0.388		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Pyrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	10/25/2013 22:11	93033
Surr: 2,4,6-Tribromophenol		0	32.7-130		65.4	%REC	1	10/25/2013 22:11	93033
Surr: 2-Fluorobiphenyl		0	34.1-116		70.2	%REC	1	10/25/2013 22:11	93033
Surr: 2-Fluorophenol		0	30.5-99		59.5	%REC	1	10/25/2013 22:11	93033
Surr: Nitrobenzene-d5		0	34.1-101		63.5	%REC	1	10/25/2013 22:11	93033
Surr: Phenol-d5		0	34.9-110		75.6	%REC	1	10/25/2013 22:11	93033
Surr: p-Terphenyl-d14		0	41.7-124		80.5	%REC	1	10/25/2013 22:11	93033
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
2-Butanone	NELAP	0.0076	0.038		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
2-Hexanone	NELAP	0.0076	0.038		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
4-Methyl-2-pentanone	NELAP	0.0076	0.038		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Acetone	NELAP	0.0076	0.038	J	0.019	mg/Kg-dry	1	10/25/2013 14:38	93117
Benzene	NELAP	0.0004	0.001		0.002	mg/Kg-dry	1	10/25/2013 14:38	93117
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Bromomethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Carbon disulfide	NELAP	0.0023	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101213

Client Project: IDOT2013-033

Report Date: 01-Nov-13

Lab ID: 13101213-010

Client Sample ID: 2396-4-B09

Matrix: SOLID

Collection Date: 10/22/2013 11:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Chloromethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Ethylbenzene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/25/2013 14:38	93117
m,p-Xylenes	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	10/25/2013 14:38	93117
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
o-Xylene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/25/2013 14:38	93117
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Toluene	NELAP	0.0008	0.004		0.004	mg/Kg-dry	1	10/25/2013 14:38	93117
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Vinyl acetate	NELAP	0.0151	0.038		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/25/2013 14:38	93117
Xylenes, Total	NELAP	0.0008	0.004	J	0.003	mg/Kg-dry	1	10/25/2013 14:38	93117
Surr: 1,2-Dichloroethane-d4		0	72.2-131		108.5	%REC	1	10/25/2013 14:38	93117
Surr: 4-Bromofluorobenzene		0	82.1-116		108.1	%REC	1	10/25/2013 14:38	93117
Surr: Dibromofluoromethane		0	77.7-120		106.3	%REC	1	10/25/2013 14:38	93117
Surr: Toluene-d8		0	86-116		92.1	%REC	1	10/25/2013 14:38	93117



CHAIN OF CUSTODY RECORD

13101213

Client Contact Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com		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: <u>USEE 20 Kane Co.</u> Project No.: <u>ID07 2013-033</u> TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other Sampler: <u>SR/CJB</u>		COC No.: <u>1</u> of <u>1</u> Lab Job No.: <u>81H 10/24/13</u> Sample Temp: <u>13101213</u> <u>2.4</u>												
Special Instructions: See Table 2 for complete parameter lists and minimum reporting limits. * If Total RCRA metal (mg/kg) result exceeds the Soil Toxicity Characteristics Limit (Table 3), run TCLP for that specific RCRA metal. ** If SPLP result exceeds Class I Standard, run TCLP for that specific parameter.				Matrix Key: W: Water S: Soil SL: Sludge S: Sediment L: Leachate DW: Drinking Water OL: Oil O: Other														
		ANALYSES																
Lab ID	Sample ID	Sample Date	Sample Time	Matrix	VOCs	SVOCs	BTEX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids	Waste Characterization	Comments		
13101213 001	2396-4-B01	10/22/13	12:45	S	X	X					X	X	X	X				
002	2396-4-B02		12:35		X	X					X	X	X	X				
003	2396-4-B03		12:20		X	X					X	X	X	X				
004	2396-4-B04		12:10		X	X					X	X	X	X				
005	2396-4-B05		12:00		X	X					X	X	X	X				
006	2396-4-B05 DUP		12:00		X	X					X	X	X	X				
007	2396-4-B06		11:50		X	X					X	X	X	X				
008	2396-4-B07		11:35		X	X					X	X	X	X				
009	2396-4-B08		11:25		X	X					X	X	X	X				
010	2396-4-B09		11:10	S	X	X					X	X	X	X				
Relinquished by:					Date/Time		10/22/13 16:55		Received by:						Date/Time		10-22-13 16:55	
Relinquished by:					Date/Time		10-23-13 09:30		Received by:						Date/Time		10-24-13 08:05	
Relinquished by:					Date/Time				Received by:						Date/Time		FEDER	

March 07, 2014

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



RE: IDOT2013-033

WorkOrder: 14021326

Dear Colleen Grey:

TEKLAB, INC received 10 samples on 2/28/2014 8:46:00 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
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	4
Laboratory Results	5
Quality Control Results	45
Receiving Check List	79
Chain of Custody	Appended

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-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: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Cooler Receipt Temp: 1.4 °C

Locations and Accreditations

	<u>Collinsville</u>	<u>Springfield</u>	<u>Kansas City</u>	<u>Collinsville Air</u>
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	3920 Pintail Dr Springfield, IL 62711-9415	8421 Nieman Road Lenexa, KS 66214	5445 Horseshoe Lake Road 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

<u>State</u>	<u>Dept</u>	<u>Cert #</u>	<u>NELAP</u>	<u>Exp Date</u>	<u>Lab</u>
Illinois	IEPA	100226	NELAP	1/31/2015	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2014	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2014	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2014	Springfield
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2014	Collinsville
Arkansas	ADEQ	88-0966		3/14/2014	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: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-001

Client Sample ID: 2396-4-B01-2

Matrix: SOLID

Collection Date: 02/27/2014 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		11.5	%	1	03/03/2014 12:52	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		88.5	%	1	03/03/2014 12:52	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.6		1	03/03/2014 18:46	R187768
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0432	mg/L	1	03/04/2014 17:47	96534
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 17:47	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 17:47	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 17:47	96534
Chromium	NELAP	0.004	0.01	J	0.0041	mg/L	1	03/04/2014 17:47	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 17:47	96534
Iron	NELAP	0.007	0.1		3.49	mg/L	1	03/04/2014 17:47	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 17:47	96534
Manganese	NELAP	0.0016	0.005		0.0236	mg/L	1	03/04/2014 17:47	96534
Nickel	NELAP	0.0033	0.01	J	0.0039	mg/L	1	03/04/2014 17:47	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 17:47	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 17:47	96534
Zinc	NELAP	0.0021	0.01		0.0118	mg/L	1	03/04/2014 17:47	96534
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	03/04/2014 9:10	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 17:38	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 13:31	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.36	4.55		< 4.55	mg/Kg-dry	1	03/04/2014 18:40	96508
Arsenic	NELAP	1.25	2.5		5.43	mg/Kg-dry	1	03/03/2014 17:00	96481
Barium	NELAP	0.25	0.5		37.4	mg/Kg-dry	1	03/03/2014 17:00	96481
Beryllium	NELAP	0.05	0.1		0.43	mg/Kg-dry	1	03/03/2014 17:00	96481
Boron	NELAP	1	2		8.89	mg/Kg-dry	1	03/03/2014 17:00	96481
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	03/03/2014 17:00	96481
Calcium	NELAP	2.5	5	S	80000	mg/Kg-dry	1	03/03/2014 17:00	96481
Chromium	NELAP	0.5	1	X	13.5	mg/Kg-dry	1	03/03/2014 17:00	96481
Cobalt	NELAP	0.5	1		6.35	mg/Kg-dry	1	03/03/2014 17:00	96481
Copper	NELAP	0.5	1		16.3	mg/Kg-dry	1	03/03/2014 17:00	96481
Iron	NELAP	1	2	S	14600	mg/Kg-dry	1	03/03/2014 17:00	96481
Lead	NELAP	2	4		7.47	mg/Kg-dry	1	03/03/2014 17:00	96481
Magnesium	NELAP	0.5	1	S	34600	mg/Kg-dry	1	03/03/2014 17:00	96481
Manganese	NELAP	0.25	0.5		377	mg/Kg-dry	1	03/03/2014 17:00	96481
Nickel	NELAP	0.5	1		16.5	mg/Kg-dry	1	03/03/2014 17:00	96481
Potassium	NELAP	5	10	S	1780	mg/Kg-dry	1	03/03/2014 17:00	96481
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	03/03/2014 17:00	96481
Sodium	NELAP	2.36	4.72		612	mg/Kg-dry	1	03/06/2014 10:28	96589
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	03/03/2014 17:00	96481
Vanadium	NELAP	0.5	1		20	mg/Kg-dry	1	03/03/2014 17:00	96481
Zinc	NELAP	0.5	1	B	30.2	mg/Kg-dry	1	03/03/2014 17:00	96481

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-001

Client Sample ID: 2396-4-B01-2

Matrix: SOLID

Collection Date: 02/27/2014 14:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
<i>Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1). MS QC limits for Ca, Fe, Mg, and K are not applicable due to high sample/spike ratio.</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588	S	< 0.588	mg/Kg-dry	1	03/03/2014 9:43	96485
<i>Se - Matrix interference present in sample. Confirmed by bench spike.</i>									
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.011	mg/Kg-dry	1	03/04/2014 8:58	96523
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.149	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
1,2-Dichlorobenzene	NELAP	0.178	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
1,3-Dichlorobenzene	NELAP	0.188	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
1,4-Dichlorobenzene	NELAP	0.178	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
2,4,5-Trichlorophenol	NELAP	0.106	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
2,4,6-Trichlorophenol	NELAP	0.141	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
2,4-Dichlorophenol	NELAP	0.135	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
2,4-Dimethylphenol	NELAP	0.142	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
2,4-Dinitrophenol	NELAP	0.12	1.12		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
2,4-Dinitrotoluene	NELAP	0.116	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
2,6-Dinitrotoluene	NELAP	0.121	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
2-Chloronaphthalene	NELAP	0.134	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
2-Chlorophenol	NELAP	0.142	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
2-Methylnaphthalene	NELAP	0.133	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
2-Nitroaniline	NELAP	0.102	1.12		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
2-Nitrophenol	NELAP	0.125	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
3,3'-Dichlorobenzidine	NELAP	0.223	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
3-Nitroaniline	NELAP	0.092	1.12		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
4,6-Dinitro-2-methylphenol	NELAP	0.121	1.12		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
4-Bromophenyl phenyl ether	NELAP	0.103	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
4-Chloro-3-methylphenol	NELAP	0.123	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
4-Chloroaniline	NELAP	0.135	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
4-Chlorophenyl phenyl ether	NELAP	0.111	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
4-Nitroaniline	NELAP	0.102	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
4-Nitrophenol	NELAP	0.109	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Acenaphthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Acenaphthylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Benzo(a)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Benzo(a)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Benzo(b)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Benzo(g,h,i)perylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Benzo(k)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Bis(2-chloroethoxy)methane	NELAP	0.131	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Bis(2-chloroethyl)ether	NELAP	0.159	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Bis(2-chloroisopropyl)ether	NELAP	0.127	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Bis(2-ethylhexyl)phthalate	NELAP	0.131	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Butyl benzyl phthalate	NELAP	0.113	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Carbazole		0.136	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442

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Lab ID: 14021326-001

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Matrix: SOLID

Collection Date: 02/27/2014 14:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Dibenzo(a,h)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Dibenzofuran	NELAP	0.141	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Diethyl phthalate	NELAP	0.107	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Dimethyl phthalate	NELAP	0.102	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Di-n-butyl phthalate	NELAP	0.115	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Di-n-octyl phthalate	NELAP	0.116	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Fluorene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Hexachlorobenzene	NELAP	0.109	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Hexachlorobutadiene	NELAP	0.173	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Hexachlorocyclopentadiene	NELAP	0.114	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Hexachloroethane	NELAP	0.187	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Isophorone	NELAP	0.132	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
m,p-Cresol	NELAP	0.141	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Naphthalene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Nitrobenzene	NELAP	0.14	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
N-Nitroso-di-n-propylamine	NELAP	0.123	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
N-Nitrosodiphenylamine	NELAP	0.103	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
o-Cresol	NELAP	0.132	0.559		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Pentachlorophenol	NELAP	0.737	2.23		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Phenanthrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Phenol	NELAP	0.13	0.391		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	03/01/2014 2:55	96442
Surr: 2,4,6-Tribromophenol		0	46-125		76.3	%REC	1	03/01/2014 2:55	96442
Surr: 2-Fluorobiphenyl		0	49.6-91.4		69.4	%REC	1	03/01/2014 2:55	96442
Surr: 2-Fluorophenol		0	51.4-93.1	S	51.3	%REC	1	03/01/2014 2:55	96442
Surr: Nitrobenzene-d5		0	32.8-110		43.1	%REC	1	03/01/2014 2:55	96442
Surr: Phenol-d5		0	57.2-100		69.6	%REC	1	03/01/2014 2:55	96442
Surr: p-Terphenyl-d14		0	61.8-117		95.7	%REC	1	03/01/2014 2:55	96442

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	03/03/2014 15:19	96551
1,1,1,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
2-Butanone	NELAP	0.0076	0.038	J	0.012	mg/Kg-dry	1	03/03/2014 15:19	96551
2-Hexanone	NELAP	0.0076	0.038		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
4-Methyl-2-pentanone	NELAP	0.0076	0.038		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Acetone	NELAP	0.0076	0.038	J	0.033	mg/Kg-dry	1	03/03/2014 15:19	96551
Benzene	NELAP	0.0004	0.001		0.003	mg/Kg-dry	1	03/03/2014 15:19	96551
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-001

Client Sample ID: 2396-4-B01-2

Matrix: SOLID

Collection Date: 02/27/2014 14:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Bromomethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Carbon disulfide	NELAP	0.0023	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Chloroethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Chloromethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Ethylbenzene	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	03/03/2014 15:19	96551
m,p-Xylenes	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	03/03/2014 15:19	96551
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
o-Xylene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	03/03/2014 15:19	96551
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Toluene	NELAP	0.0008	0.004		0.005	mg/Kg-dry	1	03/03/2014 15:19	96551
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Vinyl acetate	NELAP	0.0153	0.038		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	03/03/2014 15:19	96551
Xylenes, Total	NELAP	0.0008	0.004	J	0.003	mg/Kg-dry	1	03/03/2014 15:19	96551
Surr: 1,2-Dichloroethane-d4		0	72.2-131		104.8	%REC	1	03/03/2014 15:19	96551
Surr: 4-Bromofluorobenzene		0	82.1-116		106.7	%REC	1	03/03/2014 15:19	96551
Surr: Dibromofluoromethane		0	77.7-120		98	%REC	1	03/03/2014 15:19	96551
Surr: Toluene-d8		0	86-116		96	%REC	1	03/03/2014 15:19	96551

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-002

Client Sample ID: 2396-4-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 14:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		9.7	%	1	03/03/2014 12:53	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		90.3	%	1	03/03/2014 12:53	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.84		1	03/03/2014 18:48	R187768
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0481	mg/L	1	03/04/2014 17:50	96534
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 17:50	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 17:50	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 17:50	96534
Chromium	NELAP	0.004	0.01	J	0.0052	mg/L	1	03/04/2014 17:50	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 17:50	96534
Iron	NELAP	0.007	0.1		3.98	mg/L	1	03/04/2014 17:50	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 17:50	96534
Manganese	NELAP	0.0016	0.005		0.027	mg/L	1	03/04/2014 17:50	96534
Nickel	NELAP	0.0033	0.01	J	0.0044	mg/L	1	03/04/2014 17:50	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 17:50	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 17:50	96534
Zinc	NELAP	0.0021	0.01		0.0153	mg/L	1	03/04/2014 17:50	96534
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	03/04/2014 9:14	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 17:41	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 13:38	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.36	4.55		< 4.55	mg/Kg-dry	1	03/04/2014 18:59	96508
Arsenic	NELAP	1.23	2.45		4.38	mg/Kg-dry	1	03/03/2014 17:32	96481
Barium	NELAP	0.25	0.49		35	mg/Kg-dry	1	03/03/2014 17:32	96481
Beryllium	NELAP	0.05	0.1		0.4	mg/Kg-dry	1	03/03/2014 17:32	96481
Boron	NELAP	0.98	1.96		8.25	mg/Kg-dry	1	03/03/2014 17:32	96481
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	03/03/2014 17:32	96481
Calcium	NELAP	2.45	4.9		77900	mg/Kg-dry	1	03/03/2014 17:32	96481
Chromium	NELAP	0.49	0.98		13	mg/Kg-dry	1	03/03/2014 17:32	96481
Cobalt	NELAP	0.49	0.98		5.75	mg/Kg-dry	1	03/03/2014 17:32	96481
Copper	NELAP	0.49	0.98		12.9	mg/Kg-dry	1	03/03/2014 17:32	96481
Iron	NELAP	0.98	1.96		14600	mg/Kg-dry	1	03/03/2014 17:32	96481
Lead	NELAP	1.96	3.92		6.47	mg/Kg-dry	1	03/03/2014 17:32	96481
Magnesium	NELAP	0.49	0.98		35200	mg/Kg-dry	1	03/03/2014 17:32	96481
Manganese	NELAP	0.25	0.49		336	mg/Kg-dry	1	03/03/2014 17:32	96481
Nickel	NELAP	0.49	0.98		15.8	mg/Kg-dry	1	03/03/2014 17:32	96481
Potassium	NELAP	4.9	9.8		1790	mg/Kg-dry	1	03/03/2014 17:32	96481
Silver	NELAP	0.49	0.54		< 0.54	mg/Kg-dry	1	03/03/2014 17:32	96481
Sodium	NELAP	2.45	4.9		337	mg/Kg-dry	1	03/03/2014 17:32	96481
Thallium	NELAP	2.45	2.55		< 2.55	mg/Kg-dry	1	03/03/2014 17:32	96481
Vanadium	NELAP	0.49	0.98		21	mg/Kg-dry	1	03/03/2014 17:32	96481
Zinc	NELAP	0.49	0.98	B	33.1	mg/Kg-dry	1	03/03/2014 17:32	96481

Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-002

Client Sample ID: 2396-4-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 14:05

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	03/03/2014 10:10	96485
SW-846 7471B									
Mercury	NELAP	0.003	0.01	J	0.01	mg/Kg-dry	1	03/04/2014 9:00	96523
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.147	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
1,2-Dichlorobenzene	NELAP	0.176	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
1,3-Dichlorobenzene	NELAP	0.186	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
1,4-Dichlorobenzene	NELAP	0.176	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
2,4,5-Trichlorophenol	NELAP	0.105	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
2,4,6-Trichlorophenol	NELAP	0.14	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
2,4-Dichlorophenol	NELAP	0.134	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
2,4-Dimethylphenol	NELAP	0.141	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
2,4-Dinitrophenol	NELAP	0.118	1.11		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
2,4-Dinitrotoluene	NELAP	0.115	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
2,6-Dinitrotoluene	NELAP	0.12	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
2-Chloronaphthalene	NELAP	0.133	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
2-Chlorophenol	NELAP	0.141	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
2-Methylnaphthalene	NELAP	0.132	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
2-Nitroaniline	NELAP	0.101	1.11		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
2-Nitrophenol	NELAP	0.124	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
3,3'-Dichlorobenzidine	NELAP	0.221	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
3-Nitroaniline	NELAP	0.091	1.11		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
4,6-Dinitro-2-methylphenol	NELAP	0.12	1.11		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
4-Bromophenyl phenyl ether	NELAP	0.102	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
4-Chloro-3-methylphenol	NELAP	0.122	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
4-Chloroaniline	NELAP	0.134	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
4-Chlorophenyl phenyl ether	NELAP	0.11	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
4-Nitroaniline	NELAP	0.101	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
4-Nitrophenol	NELAP	0.109	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Acenaphthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Acenaphthylene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Anthracene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Benzo(a)anthracene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Benzo(a)pyrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Benzo(b)fluoranthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Benzo(g,h,i)perylene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Benzo(k)fluoranthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Bis(2-chloroethoxy)methane	NELAP	0.13	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Bis(2-chloroethyl)ether	NELAP	0.157	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Bis(2-chloroisopropyl)ether	NELAP	0.126	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Bis(2-ethylhexyl)phthalate	NELAP	0.13	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Butyl benzyl phthalate	NELAP	0.112	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Carbazole		0.135	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Chrysene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Dibenzo(a,h)anthracene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Dibenzofuran	NELAP	0.14	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Diethyl phthalate	NELAP	0.106	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-002

Client Sample ID: 2396-4-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 14:05

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	0.101	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Di-n-butyl phthalate	NELAP	0.114	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Di-n-octyl phthalate	NELAP	0.115	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Fluoranthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Fluorene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Hexachlorobenzene	NELAP	0.109	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Hexachlorobutadiene	NELAP	0.172	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Hexachlorocyclopentadiene	NELAP	0.113	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Hexachloroethane	NELAP	0.185	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Isophorone	NELAP	0.131	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
m,p-Cresol	NELAP	0.14	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Naphthalene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Nitrobenzene	NELAP	0.138	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
N-Nitroso-di-n-propylamine	NELAP	0.122	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
N-Nitrosodiphenylamine	NELAP	0.102	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
o-Cresol	NELAP	0.131	0.554		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Pentachlorophenol	NELAP	0.731	2.21		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Phenanthrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Phenol	NELAP	0.128	0.388		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Pyrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:03	96442
Surr: 2,4,6-Tribromophenol		0	46-125		85.9	%REC	1	03/03/2014 10:03	96442
Surr: 2-Fluorobiphenyl		0	49.6-91.4		72.4	%REC	1	03/03/2014 10:03	96442
Surr: 2-Fluorophenol		0	51.4-93.1		75.2	%REC	1	03/03/2014 10:03	96442
Surr: Nitrobenzene-d5		0	32.8-110		78.9	%REC	1	03/03/2014 10:03	96442
Surr: Phenol-d5		0	57.2-100		80.8	%REC	1	03/03/2014 10:03	96442
Surr: p-Terphenyl-d14		0	61.8-117		84.5	%REC	1	03/03/2014 10:03	96442
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
1,1,2,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
2-Butanone	NELAP	0.0074	0.037	J	0.011	mg/Kg-dry	1	02/28/2014 13:07	96521
2-Hexanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
4-Methyl-2-pentanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Acetone	NELAP	0.0074	0.037	J	0.032	mg/Kg-dry	1	02/28/2014 13:07	96521
Benzene	NELAP	0.0004	0.001		0.004	mg/Kg-dry	1	02/28/2014 13:07	96521
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Bromomethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Carbon disulfide	NELAP	0.0022	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Chlorobenzene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-002

Client Sample ID: 2396-4-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 14:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Chloromethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Ethylbenzene	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	02/28/2014 13:07	96521
m,p-Xylenes	NELAP	0.0007	0.004	J	0.003	mg/Kg-dry	1	02/28/2014 13:07	96521
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Methylene chloride	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	02/28/2014 13:07	96521
o-Xylene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	02/28/2014 13:07	96521
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Toluene	NELAP	0.0007	0.004		0.006	mg/Kg-dry	1	02/28/2014 13:07	96521
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Vinyl acetate	NELAP	0.0148	0.037		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	02/28/2014 13:07	96521
Xylenes, Total	NELAP	0.0007	0.004	J	0.004	mg/Kg-dry	1	02/28/2014 13:07	96521
Surr: 1,2-Dichloroethane-d4		0	72.2-131		129.9	%REC	1	02/28/2014 13:07	96521
Surr: 4-Bromofluorobenzene		0	82.1-116		89	%REC	1	02/28/2014 13:07	96521
Surr: Dibromofluoromethane		0	77.7-120		109.9	%REC	1	02/28/2014 13:07	96521
Surr: Toluene-d8		0	86-116	S	84.5	%REC	1	02/28/2014 13:07	96521

Surrogate recovery is outside QC limits due to matrix interference.

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-003

Client Sample ID: 2396-4-B03-2

Matrix: SOLID

Collection Date: 02/27/2014 13:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		9.6	%	1	02/28/2014 18:10	R187735
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		90.4	%	1	02/28/2014 18:10	R187735
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.46		1	03/03/2014 18:50	R187768
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0364	mg/L	1	03/04/2014 17:54	96534
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 17:54	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 17:54	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 17:54	96534
Chromium	NELAP	0.004	0.01		< 0.01	mg/L	1	03/04/2014 17:54	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 17:54	96534
Iron	NELAP	0.007	0.1		2.35	mg/L	1	03/04/2014 17:54	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 17:54	96534
Manganese	NELAP	0.0016	0.005		0.0155	mg/L	1	03/04/2014 17:54	96534
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	03/04/2014 17:54	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 17:54	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 17:54	96534
Zinc	NELAP	0.0021	0.01		0.0103	mg/L	1	03/04/2014 17:54	96534
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	03/04/2014 9:17	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 17:45	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 13:41	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.55	4.9		< 4.9	mg/Kg-dry	1	03/04/2014 19:05	96508
Arsenic	NELAP	1.18	2.36		4.3	mg/Kg-dry	1	03/03/2014 17:38	96481
Barium	NELAP	0.24	0.47		40.2	mg/Kg-dry	1	03/03/2014 17:38	96481
Beryllium	NELAP	0.05	0.09		0.36	mg/Kg-dry	1	03/03/2014 17:38	96481
Boron	NELAP	0.94	1.89		6.52	mg/Kg-dry	1	03/03/2014 17:38	96481
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	03/03/2014 17:38	96481
Calcium	NELAP	2.36	4.72		82300	mg/Kg-dry	1	03/03/2014 17:38	96481
Chromium	NELAP	0.47	0.94		11.2	mg/Kg-dry	1	03/03/2014 17:38	96481
Cobalt	NELAP	0.47	0.94		4.72	mg/Kg-dry	1	03/03/2014 17:38	96481
Copper	NELAP	0.47	0.94		10.6	mg/Kg-dry	1	03/03/2014 17:38	96481
Iron	NELAP	0.94	1.89		12300	mg/Kg-dry	1	03/03/2014 17:38	96481
Lead	NELAP	1.89	3.77		5.77	mg/Kg-dry	1	03/03/2014 17:38	96481
Magnesium	NELAP	0.47	0.94		41100	mg/Kg-dry	1	03/03/2014 17:38	96481
Manganese	NELAP	0.24	0.47		312	mg/Kg-dry	1	03/03/2014 17:38	96481
Nickel	NELAP	0.47	0.94		12.2	mg/Kg-dry	1	03/03/2014 17:38	96481
Potassium	NELAP	4.72	9.43		1360	mg/Kg-dry	1	03/03/2014 17:38	96481
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	03/03/2014 17:38	96481
Sodium	NELAP	2.36	4.72		307	mg/Kg-dry	1	03/03/2014 17:38	96481
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	03/03/2014 17:38	96481
Vanadium	NELAP	0.47	0.94		17.1	mg/Kg-dry	1	03/03/2014 17:38	96481
Zinc	NELAP	0.47	0.94	B	27.8	mg/Kg-dry	1	03/03/2014 17:38	96481

Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-003

Client Sample ID: 2396-4-B03-2

Matrix: SOLID

Collection Date: 02/27/2014 13:50

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	03/03/2014 10:13	96485
SW-846 7471B									
Mercury	NELAP	0.003	0.011	J	0.011	mg/Kg-dry	1	03/04/2014 9:07	96523
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.147	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
1,2-Dichlorobenzene	NELAP	0.176	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
1,3-Dichlorobenzene	NELAP	0.186	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
1,4-Dichlorobenzene	NELAP	0.176	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
2,4,5-Trichlorophenol	NELAP	0.105	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
2,4,6-Trichlorophenol	NELAP	0.14	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
2,4-Dichlorophenol	NELAP	0.134	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
2,4-Dimethylphenol	NELAP	0.141	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
2,4-Dinitrophenol	NELAP	0.118	1.11		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
2,4-Dinitrotoluene	NELAP	0.115	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
2,6-Dinitrotoluene	NELAP	0.12	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
2-Chloronaphthalene	NELAP	0.133	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
2-Chlorophenol	NELAP	0.141	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
2-Methylnaphthalene	NELAP	0.132	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
2-Nitroaniline	NELAP	0.101	1.11		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
2-Nitrophenol	NELAP	0.124	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
3,3'-Dichlorobenzidine	NELAP	0.221	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
3-Nitroaniline	NELAP	0.091	1.11		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
4,6-Dinitro-2-methylphenol	NELAP	0.12	1.11		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
4-Bromophenyl phenyl ether	NELAP	0.102	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
4-Chloro-3-methylphenol	NELAP	0.122	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
4-Chloroaniline	NELAP	0.134	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
4-Chlorophenyl phenyl ether	NELAP	0.11	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
4-Nitroaniline	NELAP	0.101	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
4-Nitrophenol	NELAP	0.109	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Acenaphthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Acenaphthylene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Anthracene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Benzo(a)anthracene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Benzo(a)pyrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Benzo(b)fluoranthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Benzo(g,h,i)perylene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Benzo(k)fluoranthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Bis(2-chloroethoxy)methane	NELAP	0.13	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Bis(2-chloroethyl)ether	NELAP	0.157	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Bis(2-chloroisopropyl)ether	NELAP	0.126	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Bis(2-ethylhexyl)phthalate	NELAP	0.13	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Butyl benzyl phthalate	NELAP	0.112	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Carbazole		0.135	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Chrysene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Dibenzo(a,h)anthracene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Dibenzofuran	NELAP	0.14	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Diethyl phthalate	NELAP	0.106	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-003

Client Sample ID: 2396-4-B03-2

Matrix: SOLID

Collection Date: 02/27/2014 13:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
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SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

Dimethyl phthalate	NELAP	0.101	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Di-n-butyl phthalate	NELAP	0.114	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Di-n-octyl phthalate	NELAP	0.115	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Fluoranthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Fluorene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Hexachlorobenzene	NELAP	0.109	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Hexachlorobutadiene	NELAP	0.172	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Hexachlorocyclopentadiene	NELAP	0.113	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Hexachloroethane	NELAP	0.185	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Isophorone	NELAP	0.131	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
m,p-Cresol	NELAP	0.14	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Naphthalene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Nitrobenzene	NELAP	0.138	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
N-Nitroso-di-n-propylamine	NELAP	0.122	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
N-Nitrosodiphenylamine	NELAP	0.102	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
o-Cresol	NELAP	0.131	0.554		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Pentachlorophenol	NELAP	0.731	2.21		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Phenanthrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Phenol	NELAP	0.128	0.388		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Pyrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/03/2014 10:36	96442
Surr: 2,4,6-Tribromophenol		0	46-125		78.2	%REC	1	03/03/2014 10:36	96442
Surr: 2-Fluorobiphenyl		0	49.6-91.4		65.6	%REC	1	03/03/2014 10:36	96442
Surr: 2-Fluorophenol		0	51.4-93.1		67.4	%REC	1	03/03/2014 10:36	96442
Surr: Nitrobenzene-d5		0	32.8-110		71.2	%REC	1	03/03/2014 10:36	96442
Surr: Phenol-d5		0	57.2-100		73.4	%REC	1	03/03/2014 10:36	96442
Surr: p-Terphenyl-d14		0	61.8-117		81.4	%REC	1	03/03/2014 10:36	96442

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
1,1,1,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
2-Butanone	NELAP	0.0077	0.038	J	0.008	mg/Kg-dry	1	02/28/2014 13:34	96521
2-Hexanone	NELAP	0.0077	0.038		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
4-Methyl-2-pentanone	NELAP	0.0077	0.038		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Acetone	NELAP	0.0077	0.038	J	0.022	mg/Kg-dry	1	02/28/2014 13:34	96521
Benzene	NELAP	0.0004	0.001		0.002	mg/Kg-dry	1	02/28/2014 13:34	96521
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Bromomethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Carbon disulfide	NELAP	0.0023	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-003

Client Sample ID: 2396-4-B03-2

Matrix: SOLID

Collection Date: 02/27/2014 13:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Chloromethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Ethylbenzene	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	02/28/2014 13:34	96521
m,p-Xylenes	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	02/28/2014 13:34	96521
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Methylene chloride	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	02/28/2014 13:34	96521
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Toluene	NELAP	0.0008	0.004		0.004	mg/Kg-dry	1	02/28/2014 13:34	96521
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Vinyl acetate	NELAP	0.0153	0.038		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	02/28/2014 13:34	96521
Xylenes, Total	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	02/28/2014 13:34	96521
Surr: 1,2-Dichloroethane-d4		0	72.2-131		104.9	%REC	1	02/28/2014 13:34	96521
Surr: 4-Bromofluorobenzene		0	82.1-116		99.8	%REC	1	02/28/2014 13:34	96521
Surr: Dibromofluoromethane		0	77.7-120		98.9	%REC	1	02/28/2014 13:34	96521
Surr: Toluene-d8		0	86-116		96.2	%REC	1	02/28/2014 13:34	96521

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-004

Client Sample ID: 2396-4-B03-2 DUP

Matrix: SOLID

Collection Date: 02/27/2014 13:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		9.6	%	1	03/03/2014 13:03	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		90.4	%	1	03/03/2014 13:03	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.03		1	03/03/2014 18:52	R187768
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		0.0609	mg/L	1	03/06/2014 18:22	96629
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0746	mg/L	1	03/04/2014 18:05	96534
Beryllium	NELAP	0.0003	0.001	J	0.0003	mg/L	1	03/04/2014 18:05	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 18:05	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 18:05	96534
Chromium	NELAP	0.004	0.01	J	0.0068	mg/L	1	03/04/2014 18:05	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 18:05	96534
Iron	NELAP	0.007	0.1	X	5.74	mg/L	1	03/04/2014 18:05	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 18:05	96534
Manganese	NELAP	0.0016	0.005		0.028	mg/L	1	03/04/2014 18:05	96534
Nickel	NELAP	0.0033	0.01	J	0.0059	mg/L	1	03/04/2014 18:05	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 18:05	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 18:05	96534
Zinc	NELAP	0.0021	0.01		0.0168	mg/L	1	03/04/2014 18:05	96534
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	03/04/2014 9:21	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 17:48	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 13:43	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.41	4.63		< 4.63	mg/Kg-dry	1	03/04/2014 19:12	96508
Arsenic	NELAP	1.18	2.36		4.78	mg/Kg-dry	1	03/03/2014 17:45	96481
Barium	NELAP	0.24	0.47		46.8	mg/Kg-dry	1	03/03/2014 17:45	96481
Beryllium	NELAP	0.05	0.09		0.36	mg/Kg-dry	1	03/03/2014 17:45	96481
Boron	NELAP	0.94	1.89		5.43	mg/Kg-dry	1	03/03/2014 17:45	96481
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	03/03/2014 17:45	96481
Calcium	NELAP	2.36	4.72		39900	mg/Kg-dry	1	03/03/2014 17:45	96481
Chromium	NELAP	0.47	0.94		12.1	mg/Kg-dry	1	03/03/2014 17:45	96481
Cobalt	NELAP	0.47	0.94		4.73	mg/Kg-dry	1	03/03/2014 17:45	96481
Copper	NELAP	0.47	0.94		9.51	mg/Kg-dry	1	03/03/2014 17:45	96481
Iron	NELAP	0.94	1.89		12300	mg/Kg-dry	1	03/03/2014 17:45	96481
Lead	NELAP	1.89	3.77		6.79	mg/Kg-dry	1	03/03/2014 17:45	96481
Magnesium	NELAP	0.47	0.94		23700	mg/Kg-dry	1	03/03/2014 17:45	96481
Manganese	NELAP	0.24	0.47		332	mg/Kg-dry	1	03/03/2014 17:45	96481
Nickel	NELAP	0.47	0.94		13.5	mg/Kg-dry	1	03/03/2014 17:45	96481
Potassium	NELAP	4.72	9.43		1090	mg/Kg-dry	1	03/03/2014 17:45	96481
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	03/03/2014 17:45	96481
Sodium	NELAP	2.36	4.72		362	mg/Kg-dry	1	03/03/2014 17:45	96481
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	03/03/2014 17:45	96481

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-004

Client Sample ID: 2396-4-B03-2 DUP

Matrix: SOLID

Collection Date: 02/27/2014 13:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.47	0.94		16.6	mg/Kg-dry	1	03/03/2014 17:45	96481
Zinc	NELAP	0.47	0.94	B	27.2	mg/Kg-dry	1	03/03/2014 17:45	96481
<i>Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.33	0.566		< 0.566	mg/Kg-dry	1	03/03/2014 10:17	96485
SW-846 7471B									
Mercury	NELAP	0.003	0.011	J	0.011	mg/Kg-dry	1	03/04/2014 9:09	96523
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.145	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
1,2-Dichlorobenzene	NELAP	0.174	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
1,3-Dichlorobenzene	NELAP	0.184	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
1,4-Dichlorobenzene	NELAP	0.174	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
2,4,5-Trichlorophenol	NELAP	0.104	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
2,4,6-Trichlorophenol	NELAP	0.138	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
2,4-Dichlorophenol	NELAP	0.132	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
2,4-Dimethylphenol	NELAP	0.139	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
2,4-Dinitrophenol	NELAP	0.117	1.09		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
2,4-Dinitrotoluene	NELAP	0.114	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
2,6-Dinitrotoluene	NELAP	0.118	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
2-Chloronaphthalene	NELAP	0.131	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
2-Chlorophenol	NELAP	0.139	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
2-Methylnaphthalene	NELAP	0.13	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
2-Nitroaniline	NELAP	0.1	1.09		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
2-Nitrophenol	NELAP	0.123	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
3,3'-Dichlorobenzidine	NELAP	0.219	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
3-Nitroaniline	NELAP	0.09	1.09		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
4,6-Dinitro-2-methylphenol	NELAP	0.118	1.09		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
4-Bromophenyl phenyl ether	NELAP	0.101	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
4-Chloro-3-methylphenol	NELAP	0.12	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
4-Chloroaniline	NELAP	0.132	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
4-Chlorophenyl phenyl ether	NELAP	0.108	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
4-Nitroaniline	NELAP	0.1	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
4-Nitrophenol	NELAP	0.107	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Acenaphthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Acenaphthylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Benzo(a)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Benzo(a)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Benzo(b)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Benzo(g,h,i)perylene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Benzo(k)fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Bis(2-chloroethoxy)methane	NELAP	0.128	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Bis(2-chloroethyl)ether	NELAP	0.155	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Bis(2-chloroisopropyl)ether	NELAP	0.125	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Bis(2-ethylhexyl)phthalate	NELAP	0.128	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Butyl benzyl phthalate	NELAP	0.11	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Carbazole		0.133	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-004

Client Sample ID: 2396-4-B03-2 DUP

Matrix: SOLID

Collection Date: 02/27/2014 13:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Dibenzo(a,h)anthracene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Dibenzofuran	NELAP	0.138	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Diethyl phthalate	NELAP	0.105	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Dimethyl phthalate	NELAP	0.1	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Di-n-butyl phthalate	NELAP	0.113	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Di-n-octyl phthalate	NELAP	0.114	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Fluoranthene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Fluorene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Hexachlorobenzene	NELAP	0.107	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Hexachlorobutadiene	NELAP	0.17	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Hexachlorocyclopentadiene	NELAP	0.112	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Hexachloroethane	NELAP	0.183	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Isophorone	NELAP	0.129	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
m,p-Cresol	NELAP	0.138	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Naphthalene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Nitrobenzene	NELAP	0.137	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
N-Nitroso-di-n-propylamine	NELAP	0.12	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
N-Nitrosodiphenylamine	NELAP	0.101	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
o-Cresol	NELAP	0.129	0.547		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Pentachlorophenol	NELAP	0.722	2.19		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Phenanthrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Phenol	NELAP	0.127	0.383		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Pyrene	NELAP	0.018	0.037		ND	mg/Kg-dry	1	02/28/2014 21:50	96442
Surr: 2,4,6-Tribromophenol		0	46-125		79.9	%REC	1	02/28/2014 21:50	96442
Surr: 2-Fluorobiphenyl		0	49.6-91.4		66.9	%REC	1	02/28/2014 21:50	96442
Surr: 2-Fluorophenol		0	51.4-93.1		67.1	%REC	1	02/28/2014 21:50	96442
Surr: Nitrobenzene-d5		0	32.8-110		69.4	%REC	1	02/28/2014 21:50	96442
Surr: Phenol-d5		0	57.2-100		74.8	%REC	1	02/28/2014 21:50	96442
Surr: p-Terphenyl-d14		0	61.8-117		80.6	%REC	1	02/28/2014 21:50	96442
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
1,1,1,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
2-Butanone	NELAP	0.008	0.04	J	0.011	mg/Kg-dry	1	03/03/2014 15:46	96551
2-Hexanone	NELAP	0.008	0.04		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
4-Methyl-2-pentanone	NELAP	0.008	0.04		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Acetone	NELAP	0.008	0.04	J	0.036	mg/Kg-dry	1	03/03/2014 15:46	96551
Benzene	NELAP	0.0004	0.001		0.001	mg/Kg-dry	1	03/03/2014 15:46	96551
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-004

Client Sample ID: 2396-4-B03-2 DUP

Matrix: SOLID

Collection Date: 02/27/2014 13:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Carbon disulfide	NELAP	0.0024	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Chloroethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Chloromethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Ethylbenzene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	03/03/2014 15:46	96551
m,p-Xylenes	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	03/03/2014 15:46	96551
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Methylene chloride	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	03/03/2014 15:46	96551
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Toluene	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	03/03/2014 15:46	96551
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Vinyl acetate	NELAP	0.0161	0.04		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	03/03/2014 15:46	96551
Xylenes, Total	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	03/03/2014 15:46	96551
Surr: 1,2-Dichloroethane-d4		0	72.2-131		109.1	%REC	1	03/03/2014 15:46	96551
Surr: 4-Bromofluorobenzene		0	82.1-116		105.6	%REC	1	03/03/2014 15:46	96551
Surr: Dibromofluoromethane		0	77.7-120		100.2	%REC	1	03/03/2014 15:46	96551
Surr: Toluene-d8		0	86-116		98.8	%REC	1	03/03/2014 15:46	96551

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-005

Client Sample ID: 2396-4-B04-2

Matrix: SOLID

Collection Date: 02/27/2014 13:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		10.6	%	1	03/03/2014 13:02	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		89.4	%	1	03/03/2014 13:02	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.43		1	03/03/2014 18:55	R187768
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0453	mg/L	1	03/04/2014 18:09	96534
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 18:09	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 18:09	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 18:09	96534
Chromium	NELAP	0.004	0.01		< 0.01	mg/L	1	03/04/2014 18:09	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 18:09	96534
Iron	NELAP	0.007	0.1		2.32	mg/L	1	03/05/2014 13:38	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 18:09	96534
Manganese	NELAP	0.0016	0.005		0.0175	mg/L	1	03/04/2014 18:09	96534
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	03/04/2014 18:09	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 18:09	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 18:09	96534
Zinc	NELAP	0.0021	0.01		0.0113	mg/L	1	03/04/2014 18:09	96534
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	03/04/2014 9:25	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 17:52	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 13:45	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.45	4.72		< 4.72	mg/Kg-dry	1	03/04/2014 19:18	96508
Arsenic	NELAP	1.14	2.27		5.17	mg/Kg-dry	1	03/03/2014 17:51	96481
Barium	NELAP	0.23	0.45		143	mg/Kg-dry	1	03/03/2014 17:51	96481
Beryllium	NELAP	0.05	0.09		0.79	mg/Kg-dry	1	03/03/2014 17:51	96481
Boron	NELAP	0.91	1.82		3.63	mg/Kg-dry	1	03/03/2014 17:51	96481
Cadmium	NELAP	0.09	0.18	J	0.16	mg/Kg-dry	1	03/03/2014 17:51	96481
Calcium	NELAP	2.27	4.55		26200	mg/Kg-dry	1	03/03/2014 17:51	96481
Chromium	NELAP	0.45	0.91	X	22.1	mg/Kg-dry	1	03/03/2014 17:51	96481
Cobalt	NELAP	0.45	0.91		11	mg/Kg-dry	1	03/03/2014 17:51	96481
Copper	NELAP	0.45	0.91		19.7	mg/Kg-dry	1	03/03/2014 17:51	96481
Iron	NELAP	0.91	1.82	X	19400	mg/Kg-dry	1	03/03/2014 17:51	96481
Lead	NELAP	1.82	3.64		17.6	mg/Kg-dry	1	03/03/2014 17:51	96481
Magnesium	NELAP	0.45	0.91		13700	mg/Kg-dry	1	03/03/2014 17:51	96481
Manganese	NELAP	0.23	0.45	X	732	mg/Kg-dry	1	03/03/2014 17:51	96481
Nickel	NELAP	0.45	0.91		27	mg/Kg-dry	1	03/03/2014 17:51	96481
Potassium	NELAP	4.55	9.09		1350	mg/Kg-dry	1	03/03/2014 17:51	96481
Silver	NELAP	0.45	0.5		< 0.5	mg/Kg-dry	1	03/03/2014 17:51	96481
Sodium	NELAP	2.27	4.55		1260	mg/Kg-dry	1	03/03/2014 17:51	96481
Thallium	NELAP	2.27	2.36		< 2.36	mg/Kg-dry	1	03/03/2014 17:51	96481
Vanadium	NELAP	0.45	0.91		34.9	mg/Kg-dry	1	03/03/2014 17:51	96481
Zinc	NELAP	0.45	0.91	B	54.1	mg/Kg-dry	1	03/03/2014 17:51	96481

Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-005

Client Sample ID: 2396-4-B04-2

Matrix: SOLID

Collection Date: 02/27/2014 13:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.324	0.556		< 0.556	mg/Kg-dry	1	03/03/2014 10:20	96485
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.019	mg/Kg-dry	1	03/04/2014 9:12	96523
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.149	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
1,2-Dichlorobenzene	NELAP	0.178	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
1,3-Dichlorobenzene	NELAP	0.188	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
1,4-Dichlorobenzene	NELAP	0.178	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
2,4,5-Trichlorophenol	NELAP	0.106	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
2,4,6-Trichlorophenol	NELAP	0.141	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
2,4-Dichlorophenol	NELAP	0.135	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
2,4-Dimethylphenol	NELAP	0.142	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
2,4-Dinitrophenol	NELAP	0.119	1.12		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
2,4-Dinitrotoluene	NELAP	0.116	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
2,6-Dinitrotoluene	NELAP	0.121	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
2-Chloronaphthalene	NELAP	0.134	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
2-Chlorophenol	NELAP	0.142	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
2-Methylnaphthalene	NELAP	0.133	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
2-Nitroaniline	NELAP	0.102	1.12		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
2-Nitrophenol	NELAP	0.125	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
3,3'-Dichlorobenzidine	NELAP	0.223	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
3-Nitroaniline	NELAP	0.092	1.12		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
4,6-Dinitro-2-methylphenol	NELAP	0.121	1.12		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
4-Bromophenyl phenyl ether	NELAP	0.103	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
4-Chloro-3-methylphenol	NELAP	0.123	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
4-Chloroaniline	NELAP	0.135	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
4-Chlorophenyl phenyl ether	NELAP	0.111	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
4-Nitroaniline	NELAP	0.102	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
4-Nitrophenol	NELAP	0.109	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Acenaphthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Acenaphthylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Benzo(a)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Benzo(a)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Benzo(b)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Benzo(g,h,i)perylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Benzo(k)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Bis(2-chloroethoxy)methane	NELAP	0.131	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Bis(2-chloroethyl)ether	NELAP	0.159	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Bis(2-chloroisopropyl)ether	NELAP	0.127	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Bis(2-ethylhexyl)phthalate	NELAP	0.131	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Butyl benzyl phthalate	NELAP	0.113	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Carbazole		0.136	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Chrysene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Dibenzo(a,h)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Dibenzofuran	NELAP	0.141	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Diethyl phthalate	NELAP	0.107	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-005

Client Sample ID: 2396-4-B04-2

Matrix: SOLID

Collection Date: 02/27/2014 13:40

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	0.102	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Di-n-butyl phthalate	NELAP	0.115	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Di-n-octyl phthalate	NELAP	0.116	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Fluorene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Hexachlorobenzene	NELAP	0.109	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Hexachlorobutadiene	NELAP	0.173	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Hexachlorocyclopentadiene	NELAP	0.114	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Hexachloroethane	NELAP	0.186	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Isophorone	NELAP	0.132	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
m,p-Cresol	NELAP	0.141	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Naphthalene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Nitrobenzene	NELAP	0.14	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
N-Nitroso-di-n-propylamine	NELAP	0.123	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
N-Nitrosodiphenylamine	NELAP	0.103	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
o-Cresol	NELAP	0.132	0.558		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Pentachlorophenol	NELAP	0.737	2.23		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Phenanthrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Phenol	NELAP	0.13	0.391		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:23	96442
Surr: 2,4,6-Tribromophenol		0	46-125		80.4	%REC	1	02/28/2014 22:23	96442
Surr: 2-Fluorobiphenyl		0	49.6-91.4		67.1	%REC	1	02/28/2014 22:23	96442
Surr: 2-Fluorophenol		0	51.4-93.1		70.3	%REC	1	02/28/2014 22:23	96442
Surr: Nitrobenzene-d5		0	32.8-110		71.8	%REC	1	02/28/2014 22:23	96442
Surr: Phenol-d5		0	57.2-100		79.7	%REC	1	02/28/2014 22:23	96442
Surr: p-Terphenyl-d14		0	61.8-117		79.7	%REC	1	02/28/2014 22:23	96442
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
2-Butanone	NELAP	0.0084	0.042		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
2-Hexanone	NELAP	0.0084	0.042		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
4-Methyl-2-pentanone	NELAP	0.0084	0.042		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Acetone	NELAP	0.0084	0.042	J	0.017	mg/Kg-dry	1	02/28/2014 14:29	96521
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Bromomethane	NELAP	0.0017	0.008		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Carbon disulfide	NELAP	0.0025	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-005

Client Sample ID: 2396-4-B04-2

Matrix: SOLID

Collection Date: 02/27/2014 13:40

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0017	0.008		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Chloromethane	NELAP	0.0017	0.008		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Ethylbenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
m,p-Xylenes	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Methylene chloride	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	02/28/2014 14:29	96521
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Toluene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Vinyl acetate	NELAP	0.0168	0.042		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Xylenes, Total	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 14:29	96521
Surr: 1,2-Dichloroethane-d4		0	72.2-131		106.2	%REC	1	02/28/2014 14:29	96521
Surr: 4-Bromofluorobenzene		0	82.1-116		101.1	%REC	1	02/28/2014 14:29	96521
Surr: Dibromofluoromethane		0	77.7-120		101.3	%REC	1	02/28/2014 14:29	96521
Surr: Toluene-d8		0	86-116		97.8	%REC	1	02/28/2014 14:29	96521

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-006

Client Sample ID: 2396-4-B05-2

Matrix: SOLID

Collection Date: 02/27/2014 13:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		11.4	%	1	03/03/2014 13:02	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		88.6	%	1	03/03/2014 13:02	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.47		1	03/03/2014 18:57	R187768
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0339	mg/L	1	03/04/2014 18:20	96534
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 18:20	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 18:20	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 18:20	96534
Chromium	NELAP	0.004	0.01		< 0.01	mg/L	1	03/04/2014 18:20	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 18:20	96534
Iron	NELAP	0.007	0.1		2	mg/L	1	03/04/2014 18:20	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 18:20	96534
Manganese	NELAP	0.0016	0.005		0.0161	mg/L	1	03/04/2014 18:20	96534
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	03/04/2014 18:20	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 18:20	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 18:20	96534
Zinc	NELAP	0.0021	0.01	J	0.008	mg/L	1	03/04/2014 18:20	96534
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	03/04/2014 9:29	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 17:55	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 13:47	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.41	4.63		< 4.63	mg/Kg-dry	1	03/04/2014 19:37	96508
Arsenic	NELAP	1.16	2.31	J	2.3	mg/Kg-dry	1	03/03/2014 17:58	96481
Barium	NELAP	0.23	0.46		45.5	mg/Kg-dry	1	03/03/2014 17:58	96481
Beryllium	NELAP	0.05	0.09		0.44	mg/Kg-dry	1	03/03/2014 17:58	96481
Boron	NELAP	0.93	1.85		8.92	mg/Kg-dry	1	03/03/2014 17:58	96481
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	03/03/2014 17:58	96481
Calcium	NELAP	2.31	4.63		97400	mg/Kg-dry	1	03/03/2014 17:58	96481
Chromium	NELAP	0.46	0.93	X	13.8	mg/Kg-dry	1	03/03/2014 17:58	96481
Cobalt	NELAP	0.46	0.93		4.79	mg/Kg-dry	1	03/03/2014 17:58	96481
Copper	NELAP	0.46	0.93		11.9	mg/Kg-dry	1	03/03/2014 17:58	96481
Iron	NELAP	0.93	1.85		12200	mg/Kg-dry	1	03/03/2014 17:58	96481
Lead	NELAP	1.85	3.7		5.31	mg/Kg-dry	1	03/03/2014 17:58	96481
Magnesium	NELAP	0.46	0.93		45600	mg/Kg-dry	1	03/03/2014 17:58	96481
Manganese	NELAP	0.23	0.46		256	mg/Kg-dry	1	03/03/2014 17:58	96481
Nickel	NELAP	0.46	0.93		12.2	mg/Kg-dry	1	03/03/2014 17:58	96481
Potassium	NELAP	4.63	9.26		1920	mg/Kg-dry	1	03/03/2014 17:58	96481
Silver	NELAP	0.46	0.51		< 0.51	mg/Kg-dry	1	03/03/2014 17:58	96481
Sodium	NELAP	2.31	4.63		354	mg/Kg-dry	1	03/03/2014 17:58	96481
Thallium	NELAP	2.31	2.41		< 2.41	mg/Kg-dry	1	03/03/2014 17:58	96481
Vanadium	NELAP	0.46	0.93		19.7	mg/Kg-dry	1	03/03/2014 17:58	96481
Zinc	NELAP	0.46	0.93	B	20.4	mg/Kg-dry	1	03/03/2014 17:58	96481

Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-006

Client Sample ID: 2396-4-B05-2

Matrix: SOLID

Collection Date: 02/27/2014 13:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.324	0.556		< 0.556	mg/Kg-dry	1	03/03/2014 10:23	96485
SW-846 7471B									
Mercury	NELAP	0.003	0.011	J	0.011	mg/Kg-dry	1	03/04/2014 9:14	96523
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.15	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
1,2-Dichlorobenzene	NELAP	0.18	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
1,3-Dichlorobenzene	NELAP	0.19	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
1,4-Dichlorobenzene	NELAP	0.18	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
2,4,5-Trichlorophenol	NELAP	0.107	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
2,4,6-Trichlorophenol	NELAP	0.142	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
2,4-Dichlorophenol	NELAP	0.137	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
2,4-Dimethylphenol	NELAP	0.143	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
2,4-Dinitrophenol	NELAP	0.121	1.13		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
2,4-Dinitrotoluene	NELAP	0.117	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
2,6-Dinitrotoluene	NELAP	0.122	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
2-Chloronaphthalene	NELAP	0.136	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
2-Chlorophenol	NELAP	0.143	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
2-Methylnaphthalene	NELAP	0.134	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
2-Nitroaniline	NELAP	0.103	1.13		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
2-Nitrophenol	NELAP	0.126	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
3,3'-Dichlorobenzidine	NELAP	0.226	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
3-Nitroaniline	NELAP	0.093	1.13		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
4,6-Dinitro-2-methylphenol	NELAP	0.122	1.13		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
4-Bromophenyl phenyl ether	NELAP	0.104	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
4-Chloro-3-methylphenol	NELAP	0.124	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
4-Chloroaniline	NELAP	0.137	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
4-Chlorophenyl phenyl ether	NELAP	0.112	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
4-Nitroaniline	NELAP	0.103	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
4-Nitrophenol	NELAP	0.111	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Acenaphthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Acenaphthylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Benzo(a)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Benzo(a)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Benzo(b)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Benzo(g,h,i)perylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Benzo(k)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Bis(2-chloroethoxy)methane	NELAP	0.132	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Bis(2-chloroethyl)ether	NELAP	0.16	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Bis(2-chloroisopropyl)ether	NELAP	0.129	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Bis(2-ethylhexyl)phthalate	NELAP	0.132	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Butyl benzyl phthalate	NELAP	0.114	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Carbazole		0.138	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Chrysene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Dibenzo(a,h)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Dibenzofuran	NELAP	0.142	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Diethyl phthalate	NELAP	0.108	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-006

Client Sample ID: 2396-4-B05-2

Matrix: SOLID

Collection Date: 02/27/2014 13:30

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	0.103	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Di-n-butyl phthalate	NELAP	0.116	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Di-n-octyl phthalate	NELAP	0.117	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Fluorene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Hexachlorobenzene	NELAP	0.111	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Hexachlorobutadiene	NELAP	0.175	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Hexachlorocyclopentadiene	NELAP	0.115	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Hexachloroethane	NELAP	0.189	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Isophorone	NELAP	0.133	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
m,p-Cresol	NELAP	0.142	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Naphthalene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Nitrobenzene	NELAP	0.141	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
N-Nitroso-di-n-propylamine	NELAP	0.124	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
N-Nitrosodiphenylamine	NELAP	0.104	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
o-Cresol	NELAP	0.133	0.565		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Pentachlorophenol	NELAP	0.745	2.26		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Phenanthrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Phenol	NELAP	0.131	0.395		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 22:55	96442
Surr: 2,4,6-Tribromophenol		0	46-125		84	%REC	1	02/28/2014 22:55	96442
Surr: 2-Fluorobiphenyl		0	49.6-91.4		72.1	%REC	1	02/28/2014 22:55	96442
Surr: 2-Fluorophenol		0	51.4-93.1		74.9	%REC	1	02/28/2014 22:55	96442
Surr: Nitrobenzene-d5		0	32.8-110		74.7	%REC	1	02/28/2014 22:55	96442
Surr: Phenol-d5		0	57.2-100		82.8	%REC	1	02/28/2014 22:55	96442
Surr: p-Terphenyl-d14		0	61.8-117		84.6	%REC	1	02/28/2014 22:55	96442
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
1,1,2,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
2-Butanone	NELAP	0.0071	0.035	J	0.007	mg/Kg-dry	1	02/28/2014 14:55	96521
2-Hexanone	NELAP	0.0071	0.035		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
4-Methyl-2-pentanone	NELAP	0.0071	0.035		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Acetone	NELAP	0.0071	0.035	J	0.021	mg/Kg-dry	1	02/28/2014 14:55	96521
Benzene	NELAP	0.0004	0.001		0.001	mg/Kg-dry	1	02/28/2014 14:55	96521
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Bromomethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Carbon disulfide	NELAP	0.0021	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Chlorobenzene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-006

Client Sample ID: 2396-4-B05-2

Matrix: SOLID

Collection Date: 02/27/2014 13:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Chloromethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Ethylbenzene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	02/28/2014 14:55	96521
m,p-Xylenes	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	02/28/2014 14:55	96521
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Methylene chloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
o-Xylene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Toluene	NELAP	0.0007	0.004	J	0.003	mg/Kg-dry	1	02/28/2014 14:55	96521
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Vinyl acetate	NELAP	0.0142	0.035		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	02/28/2014 14:55	96521
Xylenes, Total	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	02/28/2014 14:55	96521
Surr: 1,2-Dichloroethane-d4		0	72.2-131		104.2	%REC	1	02/28/2014 14:55	96521
Surr: 4-Bromofluorobenzene		0	82.1-116		93.5	%REC	1	02/28/2014 14:55	96521
Surr: Dibromofluoromethane		0	77.7-120		98.2	%REC	1	02/28/2014 14:55	96521
Surr: Toluene-d8		0	86-116		92.7	%REC	1	02/28/2014 14:55	96521

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-007

Client Sample ID: 2396-4-B06-2

Matrix: SOLID

Collection Date: 02/27/2014 12:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		25	%	1	03/03/2014 12:55	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		75	%	1	03/03/2014 12:55	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.59		1	03/03/2014 19:03	R187768
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		0.0487	mg/L	1	03/06/2014 18:28	96629
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0928	mg/L	1	03/04/2014 18:23	96534
Beryllium	NELAP	0.0003	0.001	J	0.0003	mg/L	1	03/04/2014 18:23	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 18:23	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 18:23	96534
Chromium	NELAP	0.004	0.01	J	0.0099	mg/L	1	03/04/2014 18:23	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 18:23	96534
Iron	NELAP	0.007	0.1	X	8.53	mg/L	1	03/04/2014 18:23	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 18:23	96534
Manganese	NELAP	0.0016	0.005		0.0309	mg/L	1	03/04/2014 18:23	96534
Nickel	NELAP	0.0033	0.01	J	0.0056	mg/L	1	03/04/2014 18:23	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 18:23	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 18:23	96534
Zinc	NELAP	0.0021	0.01		0.025	mg/L	1	03/04/2014 18:23	96534
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	03/04/2014 9:32	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 18:16	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 13:50	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	03/04/2014 19:44	96508
Arsenic	NELAP	1.2	2.4	X	11.4	mg/Kg-dry	1	03/03/2014 18:04	96481
Barium	NELAP	0.24	0.48		253	mg/Kg-dry	1	03/03/2014 18:04	96481
Beryllium	NELAP	0.05	0.1		0.89	mg/Kg-dry	1	03/03/2014 18:04	96481
Boron	NELAP	0.96	1.92		3.35	mg/Kg-dry	1	03/03/2014 18:04	96481
Cadmium	NELAP	0.1	0.19		< 0.19	mg/Kg-dry	1	03/03/2014 18:04	96481
Calcium	NELAP	2.4	4.81		4550	mg/Kg-dry	1	03/03/2014 18:04	96481
Chromium	NELAP	0.48	0.96	X	26.4	mg/Kg-dry	1	03/03/2014 18:04	96481
Cobalt	NELAP	0.48	0.96		11	mg/Kg-dry	1	03/03/2014 18:04	96481
Copper	NELAP	0.48	0.96		24.2	mg/Kg-dry	1	03/03/2014 18:04	96481
Iron	NELAP	0.96	1.92	X	27300	mg/Kg-dry	1	03/03/2014 18:04	96481
Lead	NELAP	1.92	3.85		14.4	mg/Kg-dry	1	03/03/2014 18:04	96481
Magnesium	NELAP	0.48	0.96		5430	mg/Kg-dry	1	03/03/2014 18:04	96481
Manganese	NELAP	0.24	0.48	X	1080	mg/Kg-dry	1	03/03/2014 18:04	96481
Nickel	NELAP	0.48	0.96		39.9	mg/Kg-dry	1	03/03/2014 18:04	96481
Potassium	NELAP	4.81	9.62		1360	mg/Kg-dry	1	03/03/2014 18:04	96481
Silver	NELAP	0.48	0.53		< 0.53	mg/Kg-dry	1	03/03/2014 18:04	96481
Sodium	NELAP	2.4	4.81		1430	mg/Kg-dry	1	03/03/2014 18:04	96481
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	03/03/2014 18:04	96481

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-007

Client Sample ID: 2396-4-B06-2

Matrix: SOLID

Collection Date: 02/27/2014 12:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.48	0.96		47.2	mg/Kg-dry	1	03/03/2014 18:04	96481
Zinc	NELAP	0.48	0.96	B	59.4	mg/Kg-dry	1	03/03/2014 18:04	96481
<i>Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588		< 0.588	mg/Kg-dry	1	03/03/2014 10:27	96485
SW-846 7471B									
Mercury	NELAP	0.003	0.013		0.032	mg/Kg-dry	1	03/04/2014 9:20	96523
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.175	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
1,2-Dichlorobenzene	NELAP	0.21	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
1,3-Dichlorobenzene	NELAP	0.222	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
1,4-Dichlorobenzene	NELAP	0.21	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
2,4,5-Trichlorophenol	NELAP	0.125	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
2,4,6-Trichlorophenol	NELAP	0.166	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
2,4-Dichlorophenol	NELAP	0.16	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
2,4-Dimethylphenol	NELAP	0.168	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
2,4-Dinitrophenol	NELAP	0.141	1.32		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
2,4-Dinitrotoluene	NELAP	0.137	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
2,6-Dinitrotoluene	NELAP	0.142	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
2-Chloronaphthalene	NELAP	0.158	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
2-Chlorophenol	NELAP	0.168	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
2-Methylnaphthalene	NELAP	0.157	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
2-Nitroaniline	NELAP	0.12	1.32		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
2-Nitrophenol	NELAP	0.148	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
3,3'-Dichlorobenzidine	NELAP	0.264	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
3-Nitroaniline	NELAP	0.108	1.32		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
4,6-Dinitro-2-methylphenol	NELAP	0.142	1.32		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
4-Bromophenyl phenyl ether	NELAP	0.121	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
4-Chloro-3-methylphenol	NELAP	0.145	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
4-Chloroaniline	NELAP	0.16	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
4-Chlorophenyl phenyl ether	NELAP	0.131	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
4-Nitroaniline	NELAP	0.12	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
4-Nitrophenol	NELAP	0.129	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Acenaphthene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Acenaphthylene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Anthracene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Benzo(a)anthracene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Benzo(a)pyrene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Benzo(b)fluoranthene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Benzo(g,h,i)perylene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Benzo(k)fluoranthene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Bis(2-chloroethoxy)methane	NELAP	0.154	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Bis(2-chloroethyl)ether	NELAP	0.187	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Bis(2-chloroisopropyl)ether	NELAP	0.15	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Bis(2-ethylhexyl)phthalate	NELAP	0.154	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Butyl benzyl phthalate	NELAP	0.133	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Carbazole		0.161	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-007

Client Sample ID: 2396-4-B06-2

Matrix: SOLID

Collection Date: 02/27/2014 12:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Dibenzo(a,h)anthracene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Dibenzofuran	NELAP	0.166	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Diethyl phthalate	NELAP	0.127	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Dimethyl phthalate	NELAP	0.12	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Di-n-butyl phthalate	NELAP	0.136	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Di-n-octyl phthalate	NELAP	0.137	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Fluoranthene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Fluorene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Hexachlorobenzene	NELAP	0.129	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Hexachlorobutadiene	NELAP	0.204	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Hexachlorocyclopentadiene	NELAP	0.135	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Hexachloroethane	NELAP	0.22	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Indeno(1,2,3-cd)pyrene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Isophorone	NELAP	0.156	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
m,p-Cresol	NELAP	0.166	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Naphthalene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Nitrobenzene	NELAP	0.165	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
N-Nitroso-di-n-propylamine	NELAP	0.145	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
N-Nitrosodiphenylamine	NELAP	0.121	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
o-Cresol	NELAP	0.156	0.659		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Pentachlorophenol	NELAP	0.871	2.64		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Phenanthrene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Phenol	NELAP	0.153	0.462		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Pyrene	NELAP	0.022	0.045		ND	mg/Kg-dry	1	02/28/2014 23:28	96442
Surr: 2,4,6-Tribromophenol		0	46-125		75.2	%REC	1	02/28/2014 23:28	96442
Surr: 2-Fluorobiphenyl		0	49.6-91.4		62.3	%REC	1	02/28/2014 23:28	96442
Surr: 2-Fluorophenol		0	51.4-93.1		72.2	%REC	1	02/28/2014 23:28	96442
Surr: Nitrobenzene-d5		0	32.8-110		69.1	%REC	1	02/28/2014 23:28	96442
Surr: Phenol-d5		0	57.2-100		77.3	%REC	1	02/28/2014 23:28	96442
Surr: p-Terphenyl-d14		0	61.8-117		76.9	%REC	1	02/28/2014 23:28	96442
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
1,1,1,2-Tetrachloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
1,1,2-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
1,1-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
1,1-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
1,2-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
1,2-Dichloropropane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
1,3-Dichloropropene, Total		0.001	0.004		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
2-Butanone	NELAP	0.0095	0.048		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
2-Hexanone	NELAP	0.0095	0.048		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
4-Methyl-2-pentanone	NELAP	0.0095	0.048		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Acetone	NELAP	0.0095	0.048	J	0.014	mg/Kg-dry	1	02/28/2014 15:21	96521
Benzene	NELAP	0.0005	0.001		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Bromodichloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Bromoform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-007

Client Sample ID: 2396-4-B06-2

Matrix: SOLID

Collection Date: 02/27/2014 12:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0019	0.01		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Carbon disulfide	NELAP	0.0029	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Carbon tetrachloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Chlorobenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Chloroethane	NELAP	0.0019	0.01		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Chloroform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Chloromethane	NELAP	0.0019	0.01		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
cis-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
cis-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Dibromochloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Ethylbenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
m,p-Xylenes	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Methylene chloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
o-Xylene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Styrene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Tetrachloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Toluene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
trans-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
trans-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Trichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Vinyl acetate	NELAP	0.019	0.048		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Xylenes, Total	NELAP	0.001	0.005		ND	mg/Kg-dry	1	02/28/2014 15:21	96521
Surr: 1,2-Dichloroethane-d4		0	72.2-131		109.3	%REC	1	02/28/2014 15:21	96521
Surr: 4-Bromofluorobenzene		0	82.1-116		96.5	%REC	1	02/28/2014 15:21	96521
Surr: Dibromofluoromethane		0	77.7-120		102.2	%REC	1	02/28/2014 15:21	96521
Surr: Toluene-d8		0	86-116		95	%REC	1	02/28/2014 15:21	96521

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-008

Client Sample ID: 2396-4-B07-2

Matrix: SOLID

Collection Date: 02/27/2014 12:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		16.5	%	1	03/03/2014 12:54	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		83.5	%	1	03/03/2014 12:54	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.35		1	03/03/2014 19:06	R187768
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	03/06/2014 18:34	96629
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0581	mg/L	1	03/04/2014 18:27	96534
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 18:27	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 18:27	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 18:27	96534
Chromium	NELAP	0.004	0.01	J	0.008	mg/L	1	03/04/2014 18:27	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 18:27	96534
Iron	NELAP	0.007	0.1	X	6.55	mg/L	1	03/04/2014 18:27	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 18:27	96534
Manganese	NELAP	0.0016	0.005		0.0353	mg/L	1	03/04/2014 18:27	96534
Nickel	NELAP	0.0033	0.01	J	0.006	mg/L	1	03/04/2014 18:27	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 18:27	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 18:27	96534
Zinc	NELAP	0.0021	0.01		0.0204	mg/L	1	03/04/2014 18:27	96534
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	03/04/2014 9:55	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 18:19	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 13:56	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	03/04/2014 19:50	96508
Arsenic	NELAP	1.14	2.27		2.65	mg/Kg-dry	1	03/05/2014 0:08	96481
Barium	NELAP	0.23	0.45		43.3	mg/Kg-dry	1	03/03/2014 18:10	96481
Beryllium	NELAP	0.05	0.09		0.37	mg/Kg-dry	1	03/03/2014 18:10	96481
Boron	NELAP	0.91	1.82		6.61	mg/Kg-dry	1	03/03/2014 18:10	96481
Cadmium	NELAP	0.09	0.18		< 0.18	mg/Kg-dry	1	03/03/2014 18:10	96481
Calcium	NELAP	2.27	4.55		77300	mg/Kg-dry	1	03/03/2014 18:10	96481
Chromium	NELAP	0.45	0.91		12.9	mg/Kg-dry	1	03/03/2014 18:10	96481
Cobalt	NELAP	0.45	0.91		4.31	mg/Kg-dry	1	03/03/2014 18:10	96481
Copper	NELAP	0.45	0.91		12	mg/Kg-dry	1	03/03/2014 18:10	96481
Iron	NELAP	0.91	1.82		13000	mg/Kg-dry	1	03/03/2014 18:10	96481
Lead	NELAP	1.82	3.64		6.28	mg/Kg-dry	1	03/03/2014 18:10	96481
Magnesium	NELAP	0.45	0.91		35900	mg/Kg-dry	1	03/03/2014 18:10	96481
Manganese	NELAP	0.23	0.45		324	mg/Kg-dry	1	03/03/2014 18:10	96481
Nickel	NELAP	0.45	0.91		12.5	mg/Kg-dry	1	03/03/2014 18:10	96481
Potassium	NELAP	4.55	9.09		1540	mg/Kg-dry	1	03/03/2014 18:10	96481
Silver	NELAP	0.45	0.5		< 0.5	mg/Kg-dry	1	03/03/2014 18:10	96481
Sodium	NELAP	2.27	4.55		447	mg/Kg-dry	1	03/03/2014 18:10	96481
Thallium	NELAP	2.27	2.36		< 2.36	mg/Kg-dry	1	03/03/2014 18:10	96481

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-008

Client Sample ID: 2396-4-B07-2

Matrix: SOLID

Collection Date: 02/27/2014 12:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.45	0.91		18.9	mg/Kg-dry	1	03/03/2014 18:10	96481
Zinc	NELAP	0.45	0.91	B	28.4	mg/Kg-dry	1	03/03/2014 18:10	96481
<i>Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588		< 0.588	mg/Kg-dry	1	03/03/2014 10:30	96485
SW-846 7471B									
Mercury	NELAP	0.003	0.012	J	0.01	mg/Kg-dry	1	03/04/2014 9:23	96523
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.158	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
1,2-Dichlorobenzene	NELAP	0.188	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
1,3-Dichlorobenzene	NELAP	0.199	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
1,4-Dichlorobenzene	NELAP	0.188	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
2,4,5-Trichlorophenol	NELAP	0.113	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
2,4,6-Trichlorophenol	NELAP	0.149	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
2,4-Dichlorophenol	NELAP	0.143	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
2,4-Dimethylphenol	NELAP	0.15	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
2,4-Dinitrophenol	NELAP	0.127	1.18		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
2,4-Dinitrotoluene	NELAP	0.123	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
2,6-Dinitrotoluene	NELAP	0.128	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
2-Chloronaphthalene	NELAP	0.142	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
2-Chlorophenol	NELAP	0.15	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
2-Methylnaphthalene	NELAP	0.141	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
2-Nitroaniline	NELAP	0.108	1.18		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
2-Nitrophenol	NELAP	0.133	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
3,3'-Dichlorobenzidine	NELAP	0.237	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
3-Nitroaniline	NELAP	0.097	1.18		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
4,6-Dinitro-2-methylphenol	NELAP	0.128	1.18		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
4-Bromophenyl phenyl ether	NELAP	0.109	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
4-Chloro-3-methylphenol	NELAP	0.13	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
4-Chloroaniline	NELAP	0.143	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
4-Chlorophenyl phenyl ether	NELAP	0.117	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
4-Nitroaniline	NELAP	0.108	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
4-Nitrophenol	NELAP	0.116	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Acenaphthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Acenaphthylene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Anthracene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Benzo(a)anthracene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Benzo(a)pyrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Benzo(b)fluoranthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Benzo(g,h,i)perylene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Benzo(k)fluoranthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Bis(2-chloroethoxy)methane	NELAP	0.139	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Bis(2-chloroethyl)ether	NELAP	0.168	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Bis(2-chloroisopropyl)ether	NELAP	0.135	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Bis(2-ethylhexyl)phthalate	NELAP	0.139	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Butyl benzyl phthalate	NELAP	0.12	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Carbazole		0.144	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-008

Client Sample ID: 2396-4-B07-2

Matrix: SOLID

Collection Date: 02/27/2014 12:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Dibenzo(a,h)anthracene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Dibenzofuran	NELAP	0.149	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Diethyl phthalate	NELAP	0.114	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Dimethyl phthalate	NELAP	0.108	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Di-n-butyl phthalate	NELAP	0.122	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Di-n-octyl phthalate	NELAP	0.123	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Fluoranthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Fluorene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Hexachlorobenzene	NELAP	0.116	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Hexachlorobutadiene	NELAP	0.184	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Hexachlorocyclopentadiene	NELAP	0.121	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Hexachloroethane	NELAP	0.198	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Isophorone	NELAP	0.14	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
m,p-Cresol	NELAP	0.149	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Naphthalene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Nitrobenzene	NELAP	0.148	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
N-Nitroso-di-n-propylamine	NELAP	0.13	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
N-Nitrosodiphenylamine	NELAP	0.109	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
o-Cresol	NELAP	0.14	0.592		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Pentachlorophenol	NELAP	0.782	2.37		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Phenanthrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Phenol	NELAP	0.137	0.415		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Pyrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	03/01/2014 0:00	96442
Surr: 2,4,6-Tribromophenol		0	46-125		78.7	%REC	1	03/01/2014 0:00	96442
Surr: 2-Fluorobiphenyl		0	49.6-91.4		62.1	%REC	1	03/01/2014 0:00	96442
Surr: 2-Fluorophenol		0	51.4-93.1		70.6	%REC	1	03/01/2014 0:00	96442
Surr: Nitrobenzene-d5		0	32.8-110		68.6	%REC	1	03/01/2014 0:00	96442
Surr: Phenol-d5		0	57.2-100		76.2	%REC	1	03/01/2014 0:00	96442
Surr: p-Terphenyl-d14		0	61.8-117		74.8	%REC	1	03/01/2014 0:00	96442
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
1,1,1,2-Tetrachloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
1,1,2-Trichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
1,1-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
1,1-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
1,2-Dichloroethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
1,2-Dichloropropane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
1,3-Dichloropropane, Total		0.0009	0.003		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
2-Butanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
2-Hexanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
4-Methyl-2-pentanone	NELAP	0.0086	0.043		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Acetone	NELAP	0.0086	0.043	J	0.015	mg/Kg-dry	1	02/28/2014 15:47	96521
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Bromodichloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Bromoform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-008

Client Sample ID: 2396-4-B07-2

Matrix: SOLID

Collection Date: 02/27/2014 12:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Carbon disulfide	NELAP	0.0026	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Carbon tetrachloride	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Chlorobenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Chloroethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Chloroform	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Chloromethane	NELAP	0.0017	0.009		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
cis-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
cis-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Dibromochloromethane	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Ethylbenzene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
m,p-Xylenes	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Methylene chloride	NELAP	0.0009	0.004	J	0.001	mg/Kg-dry	1	02/28/2014 15:47	96521
o-Xylene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Styrene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Tetrachloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Toluene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
trans-1,2-Dichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
trans-1,3-Dichloropropene	NELAP	0.0009	0.003		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Trichloroethene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Vinyl acetate	NELAP	0.0172	0.043		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Xylenes, Total	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	02/28/2014 15:47	96521
Surr: 1,2-Dichloroethane-d4		0	72.2-131		108.7	%REC	1	02/28/2014 15:47	96521
Surr: 4-Bromofluorobenzene		0	82.1-116		98.1	%REC	1	02/28/2014 15:47	96521
Surr: Dibromofluoromethane		0	77.7-120		101.8	%REC	1	02/28/2014 15:47	96521
Surr: Toluene-d8		0	86-116		95.2	%REC	1	02/28/2014 15:47	96521

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-009

Client Sample ID: 2396-4-B08-2

Matrix: SOLID

Collection Date: 02/27/2014 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		12.4	%	1	02/28/2014 18:09	R187735
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		87.6	%	1	02/28/2014 18:09	R187735
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.42		1	03/03/2014 19:09	R187768
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	03/06/2014 18:40	96629
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0627	mg/L	1	03/04/2014 18:31	96534
Beryllium	NELAP	0.0003	0.001	J	0.0003	mg/L	1	03/04/2014 18:31	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 18:31	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 18:31	96534
Chromium	NELAP	0.004	0.01	J	0.0078	mg/L	1	03/04/2014 18:31	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 18:31	96534
Iron	NELAP	0.007	0.1	X	7.22	mg/L	1	03/04/2014 18:31	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 18:31	96534
Manganese	NELAP	0.0016	0.005		0.0404	mg/L	1	03/04/2014 18:31	96534
Nickel	NELAP	0.0033	0.01	J	0.006	mg/L	1	03/04/2014 18:31	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 18:31	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 18:31	96534
Zinc	NELAP	0.0021	0.01		0.0178	mg/L	1	03/04/2014 18:31	96534
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	03/04/2014 9:58	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 18:22	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 13:59	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.36	4.55		< 4.55	mg/Kg-dry	1	03/04/2014 19:57	96508
Arsenic	NELAP	1.16	2.31		4.8	mg/Kg-dry	1	03/04/2014 12:56	96484
Barium	NELAP	0.23	0.46		47.1	mg/Kg-dry	1	03/03/2014 21:20	96484
Beryllium	NELAP	0.05	0.09		0.48	mg/Kg-dry	1	03/03/2014 21:20	96484
Boron	NELAP	0.93	1.85		9.8	mg/Kg-dry	1	03/03/2014 21:20	96484
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	03/04/2014 12:56	96484
Calcium	NELAP	2.31	4.63		81000	mg/Kg-dry	1	03/03/2014 21:20	96484
Chromium	NELAP	0.46	0.93	X	14.2	mg/Kg-dry	1	03/03/2014 21:20	96484
Cobalt	NELAP	0.46	0.93		5.66	mg/Kg-dry	1	03/03/2014 21:20	96484
Copper	NELAP	0.46	0.93		13.6	mg/Kg-dry	1	03/03/2014 21:20	96484
Iron	NELAP	0.93	1.85	X	16000	mg/Kg-dry	1	03/03/2014 21:20	96484
Lead	NELAP	1.85	3.7		4.93	mg/Kg-dry	1	03/03/2014 21:20	96484
Magnesium	NELAP	0.46	0.93		36000	mg/Kg-dry	1	03/03/2014 21:20	96484
Manganese	NELAP	0.23	0.46		350	mg/Kg-dry	1	03/03/2014 21:20	96484
Nickel	NELAP	0.46	0.93		15.1	mg/Kg-dry	1	03/03/2014 21:20	96484
Potassium	NELAP	4.63	9.26		1630	mg/Kg-dry	1	03/03/2014 21:20	96484
Silver	NELAP	0.46	0.51		< 0.51	mg/Kg-dry	1	03/03/2014 21:20	96484
Sodium	NELAP	2.31	4.63		628	mg/Kg-dry	1	03/03/2014 21:20	96484
Thallium	NELAP	2.31	2.41		< 2.41	mg/Kg-dry	1	03/03/2014 21:20	96484

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-009

Client Sample ID: 2396-4-B08-2

Matrix: SOLID

Collection Date: 02/27/2014 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.46	0.93		19	mg/Kg-dry	1	03/03/2014 21:20	96484
Zinc	NELAP	0.46	0.93	B	29.8	mg/Kg-dry	1	03/04/2014 12:56	96484
<i>Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.343	0.588		< 0.588	mg/Kg-dry	1	03/03/2014 10:34	96485
SW-846 7471B									
Mercury	NELAP	0.003	0.011	J	0.009	mg/Kg-dry	1	03/04/2014 9:25	96523
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.152	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
1,2-Dichlorobenzene	NELAP	0.182	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
1,3-Dichlorobenzene	NELAP	0.192	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
1,4-Dichlorobenzene	NELAP	0.182	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
2,4,5-Trichlorophenol	NELAP	0.109	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
2,4,6-Trichlorophenol	NELAP	0.144	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
2,4-Dichlorophenol	NELAP	0.138	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
2,4-Dimethylphenol	NELAP	0.145	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
2,4-Dinitrophenol	NELAP	0.122	1.14		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
2,4-Dinitrotoluene	NELAP	0.119	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
2,6-Dinitrotoluene	NELAP	0.123	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
2-Chloronaphthalene	NELAP	0.137	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
2-Chlorophenol	NELAP	0.145	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
2-Methylnaphthalene	NELAP	0.136	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
2-Nitroaniline	NELAP	0.104	1.14		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
2-Nitrophenol	NELAP	0.128	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
3,3'-Dichlorobenzidine	NELAP	0.229	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
3-Nitroaniline	NELAP	0.094	1.14		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
4,6-Dinitro-2-methylphenol	NELAP	0.123	1.14		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
4-Bromophenyl phenyl ether	NELAP	0.105	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
4-Chloro-3-methylphenol	NELAP	0.126	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
4-Chloroaniline	NELAP	0.138	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
4-Chlorophenyl phenyl ether	NELAP	0.113	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
4-Nitroaniline	NELAP	0.104	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
4-Nitrophenol	NELAP	0.112	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Acenaphthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Acenaphthylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Benzo(a)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Benzo(a)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Benzo(b)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Benzo(g,h,i)perylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Benzo(k)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Bis(2-chloroethoxy)methane	NELAP	0.134	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Bis(2-chloroethyl)ether	NELAP	0.162	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Bis(2-chloroisopropyl)ether	NELAP	0.13	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Bis(2-ethylhexyl)phthalate	NELAP	0.134	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Butyl benzyl phthalate	NELAP	0.115	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Carbazole		0.14	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-009

Client Sample ID: 2396-4-B08-2

Matrix: SOLID

Collection Date: 02/27/2014 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Dibenzo(a,h)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Dibenzofuran	NELAP	0.144	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Diethyl phthalate	NELAP	0.11	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Dimethyl phthalate	NELAP	0.104	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Di-n-butyl phthalate	NELAP	0.118	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Di-n-octyl phthalate	NELAP	0.119	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Fluorene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Hexachlorobenzene	NELAP	0.112	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Hexachlorobutadiene	NELAP	0.177	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Hexachlorocyclopentadiene	NELAP	0.117	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Hexachloroethane	NELAP	0.191	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Isophorone	NELAP	0.135	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
m,p-Cresol	NELAP	0.144	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Naphthalene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Nitrobenzene	NELAP	0.143	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
N-Nitroso-di-n-propylamine	NELAP	0.126	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
N-Nitrosodiphenylamine	NELAP	0.105	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
o-Cresol	NELAP	0.135	0.572		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Pentachlorophenol	NELAP	0.755	2.29		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Phenanthrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Phenol	NELAP	0.133	0.4		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	03/01/2014 0:33	96442
Surr: 2,4,6-Tribromophenol		0	46-125		77.9	%REC	1	03/01/2014 0:33	96442
Surr: 2-Fluorobiphenyl		0	49.6-91.4		67.3	%REC	1	03/01/2014 0:33	96442
Surr: 2-Fluorophenol		0	51.4-93.1		69.4	%REC	1	03/01/2014 0:33	96442
Surr: Nitrobenzene-d5		0	32.8-110		71	%REC	1	03/01/2014 0:33	96442
Surr: Phenol-d5		0	57.2-100		78	%REC	1	03/01/2014 0:33	96442
Surr: p-Terphenyl-d14		0	61.8-117		79.4	%REC	1	03/01/2014 0:33	96442
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
1,1,1,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
2-Butanone	NELAP	0.0081	0.041		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
2-Hexanone	NELAP	0.0081	0.041		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
4-Methyl-2-pentanone	NELAP	0.0081	0.041		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Acetone	NELAP	0.0081	0.041	J	0.012	mg/Kg-dry	1	02/28/2014 16:13	96521
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-009

Client Sample ID: 2396-4-B08-2

Matrix: SOLID

Collection Date: 02/27/2014 12:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Carbon disulfide	NELAP	0.0024	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Chloroethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Chloromethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Ethylbenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
m,p-Xylenes	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Toluene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Vinyl acetate	NELAP	0.0163	0.041		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Xylenes, Total	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	02/28/2014 16:13	96521
Surr: 1,2-Dichloroethane-d4		0	72.2-131		109.9	%REC	1	02/28/2014 16:13	96521
Surr: 4-Bromofluorobenzene		0	82.1-116		98.9	%REC	1	02/28/2014 16:13	96521
Surr: Dibromofluoromethane		0	77.7-120		101.2	%REC	1	02/28/2014 16:13	96521
Surr: Toluene-d8		0	86-116		95.3	%REC	1	02/28/2014 16:13	96521

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-010

Client Sample ID: 2396-4-B09-2

Matrix: SOLID

Collection Date: 02/27/2014 11:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		10.9	%	1	03/03/2014 13:11	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		89.1	%	1	03/03/2014 13:11	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.35		1	03/03/2014 19:12	R187768
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0469	mg/L	1	03/04/2014 18:34	96534
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 18:34	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 18:34	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 18:34	96534
Chromium	NELAP	0.004	0.01	J	0.0055	mg/L	1	03/04/2014 18:34	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 18:34	96534
Iron	NELAP	0.007	0.1		4.26	mg/L	1	03/04/2014 18:34	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 18:34	96534
Manganese	NELAP	0.0016	0.005		0.0284	mg/L	1	03/04/2014 18:34	96534
Nickel	NELAP	0.0033	0.01	J	0.0044	mg/L	1	03/04/2014 18:34	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 18:34	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 18:34	96534
Zinc	NELAP	0.0021	0.01		0.0146	mg/L	1	03/04/2014 18:34	96534
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	03/04/2014 10:02	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 18:26	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 14:01	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.55	4.9		< 4.9	mg/Kg-dry	1	03/04/2014 20:03	96508
Arsenic	NELAP	1.18	2.36		4.34	mg/Kg-dry	1	03/04/2014 13:00	96484
Barium	NELAP	0.24	0.47		48.7	mg/Kg-dry	1	03/03/2014 21:23	96484
Beryllium	NELAP	0.05	0.09		0.49	mg/Kg-dry	1	03/03/2014 21:23	96484
Boron	NELAP	0.94	1.89		10.8	mg/Kg-dry	1	03/03/2014 21:23	96484
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	03/04/2014 13:00	96484
Calcium	NELAP	2.36	4.72		78300	mg/Kg-dry	1	03/03/2014 21:23	96484
Chromium	NELAP	0.47	0.94	X	14.3	mg/Kg-dry	1	03/03/2014 21:23	96484
Cobalt	NELAP	0.47	0.94		6.08	mg/Kg-dry	1	03/03/2014 21:23	96484
Copper	NELAP	0.47	0.94		12.5	mg/Kg-dry	1	03/03/2014 21:23	96484
Iron	NELAP	0.94	1.89		13600	mg/Kg-dry	1	03/03/2014 21:23	96484
Lead	NELAP	1.89	3.77		4.73	mg/Kg-dry	1	03/03/2014 21:23	96484
Magnesium	NELAP	0.47	0.94		31500	mg/Kg-dry	1	03/03/2014 21:23	96484
Manganese	NELAP	0.24	0.47		326	mg/Kg-dry	1	03/03/2014 21:23	96484
Nickel	NELAP	0.47	0.94		15.2	mg/Kg-dry	1	03/03/2014 21:23	96484
Potassium	NELAP	4.72	9.43		1810	mg/Kg-dry	1	03/03/2014 21:23	96484
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	03/03/2014 21:23	96484
Sodium	NELAP	2.36	4.72		141	mg/Kg-dry	1	03/03/2014 21:23	96484
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	03/03/2014 21:23	96484
Vanadium	NELAP	0.47	0.94		17.9	mg/Kg-dry	1	03/03/2014 21:23	96484
Zinc	NELAP	0.47	0.94	B	30.6	mg/Kg-dry	1	03/04/2014 13:00	96484

Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-010

Client Sample ID: 2396-4-B09-2

Matrix: SOLID

Collection Date: 02/27/2014 11:45

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	03/03/2014 10:54	96485
SW-846 7471B									
Mercury	NELAP	0.003	0.011	J	0.011	mg/Kg-dry	1	03/04/2014 9:27	96523
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.148	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
1,2-Dichlorobenzene	NELAP	0.176	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
1,3-Dichlorobenzene	NELAP	0.186	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
1,4-Dichlorobenzene	NELAP	0.176	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
2,4,5-Trichlorophenol	NELAP	0.105	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
2,4,6-Trichlorophenol	NELAP	0.14	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
2,4-Dichlorophenol	NELAP	0.134	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
2,4-Dimethylphenol	NELAP	0.141	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
2,4-Dinitrophenol	NELAP	0.119	1.11		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
2,4-Dinitrotoluene	NELAP	0.115	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
2,6-Dinitrotoluene	NELAP	0.12	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
2-Chloronaphthalene	NELAP	0.133	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
2-Chlorophenol	NELAP	0.141	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
2-Methylnaphthalene	NELAP	0.132	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
2-Nitroaniline	NELAP	0.101	1.11		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
2-Nitrophenol	NELAP	0.124	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
3,3'-Dichlorobenzidine	NELAP	0.222	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
3-Nitroaniline	NELAP	0.091	1.11		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
4,6-Dinitro-2-methylphenol	NELAP	0.12	1.11		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
4-Bromophenyl phenyl ether	NELAP	0.102	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
4-Chloro-3-methylphenol	NELAP	0.122	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
4-Chloroaniline	NELAP	0.134	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
4-Chlorophenyl phenyl ether	NELAP	0.11	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
4-Nitroaniline	NELAP	0.101	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
4-Nitrophenol	NELAP	0.109	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Acenaphthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Acenaphthylene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Anthracene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Benzo(a)anthracene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Benzo(a)pyrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Benzo(b)fluoranthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Benzo(g,h,i)perylene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Benzo(k)fluoranthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Bis(2-chloroethoxy)methane	NELAP	0.13	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Bis(2-chloroethyl)ether	NELAP	0.157	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Bis(2-chloroisopropyl)ether	NELAP	0.126	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Bis(2-ethylhexyl)phthalate	NELAP	0.13	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Butyl benzyl phthalate	NELAP	0.112	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Carbazole		0.135	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Chrysene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Dibenzo(a,h)anthracene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Dibenzofuran	NELAP	0.14	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Diethyl phthalate	NELAP	0.106	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-010

Client Sample ID: 2396-4-B09-2

Matrix: SOLID

Collection Date: 02/27/2014 11:45

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	0.101	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Di-n-butyl phthalate	NELAP	0.114	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Di-n-octyl phthalate	NELAP	0.115	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Fluoranthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Fluorene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Hexachlorobenzene	NELAP	0.109	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Hexachlorobutadiene	NELAP	0.172	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Hexachlorocyclopentadiene	NELAP	0.113	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Hexachloroethane	NELAP	0.185	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Isophorone	NELAP	0.131	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
m,p-Cresol	NELAP	0.14	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Naphthalene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Nitrobenzene	NELAP	0.139	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
N-Nitroso-di-n-propylamine	NELAP	0.122	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
N-Nitrosodiphenylamine	NELAP	0.102	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
o-Cresol	NELAP	0.131	0.555		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Pentachlorophenol	NELAP	0.732	2.22		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Phenanthrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Phenol	NELAP	0.129	0.388		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Pyrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	03/01/2014 1:05	96442
Surr: 2,4,6-Tribromophenol		0	46-125		78.5	%REC	1	03/01/2014 1:05	96442
Surr: 2-Fluorobiphenyl		0	49.6-91.4		63.9	%REC	1	03/01/2014 1:05	96442
Surr: 2-Fluorophenol		0	51.4-93.1		64.9	%REC	1	03/01/2014 1:05	96442
Surr: Nitrobenzene-d5		0	32.8-110		66.1	%REC	1	03/01/2014 1:05	96442
Surr: Phenol-d5		0	57.2-100		73.5	%REC	1	03/01/2014 1:05	96442
Surr: p-Terphenyl-d14		0	61.8-117		81	%REC	1	03/01/2014 1:05	96442
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
1,1,2,2-Tetrachloroethane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
1,1,2-Trichloroethane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
1,1-Dichloroethane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
1,1-Dichloroethene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
1,2-Dichloroethane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
1,2-Dichloropropane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
2-Butanone	NELAP	0.0069	0.035	J	0.012	mg/Kg-dry	1	02/28/2014 16:39	96521
2-Hexanone	NELAP	0.0069	0.035		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
4-Methyl-2-pentanone	NELAP	0.0069	0.035		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Acetone	NELAP	0.0069	0.035	J	0.032	mg/Kg-dry	1	02/28/2014 16:39	96521
Benzene	NELAP	0.0003	0.001		0.002	mg/Kg-dry	1	02/28/2014 16:39	96521
Bromodichloromethane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Bromoform	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Bromomethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Carbon disulfide	NELAP	0.0021	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Carbon tetrachloride	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Chlorobenzene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021326

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021326-010

Client Sample ID: 2396-4-B09-2

Matrix: SOLID

Collection Date: 02/27/2014 11:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chloroethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Chloroform	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Chloromethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
cis-1,2-Dichloroethene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Dibromochloromethane	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Ethylbenzene	NELAP	0.0007	0.003	J	0.001	mg/Kg-dry	1	02/28/2014 16:39	96521
m,p-Xylenes	NELAP	0.0007	0.003	J	0.002	mg/Kg-dry	1	02/28/2014 16:39	96521
Methyl tert-butyl ether	NELAP	0.0003	0.001		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Methylene chloride	NELAP	0.0007	0.003	J	0.001	mg/Kg-dry	1	02/28/2014 16:39	96521
o-Xylene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Styrene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Tetrachloroethene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Toluene	NELAP	0.0007	0.003		0.004	mg/Kg-dry	1	02/28/2014 16:39	96521
trans-1,2-Dichloroethene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Trichloroethene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Vinyl acetate	NELAP	0.0139	0.035		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Vinyl chloride	NELAP	0.0003	0.001		ND	mg/Kg-dry	1	02/28/2014 16:39	96521
Xylenes, Total	NELAP	0.0007	0.003	J	0.002	mg/Kg-dry	1	02/28/2014 16:39	96521
Surr: 1,2-Dichloroethane-d4		0	72.2-131		83.9	%REC	1	02/28/2014 16:39	96521
Surr: 4-Bromofluorobenzene		0	82.1-116		99.3	%REC	1	02/28/2014 16:39	96521
Surr: Dibromofluoromethane		0	77.7-120		88.8	%REC	1	02/28/2014 16:39	96521
Surr: Toluene-d8		0	86-116		102.9	%REC	1	02/28/2014 16:39	96521



CHAIN OF CUSTODY RECORD

Client Contact	Andrews Engineering, Inc. 3300 Ginger Creek Drive Springfield, IL 62711 217-787-2334 Contact: Colleen Grey email: cgrey@andrews-eng.com	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: <u>US Rt 20 Kane Co</u>		COC No.: <u>1</u> of <u>1</u>
	Project No.: <u>IDOT 2013-033</u>		Lab Job No.: <u>14021304</u>
	TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other		Sample Temp: <u>1.4</u>
	Sampler: <u>TT/CRA</u>		

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES										Comments			
					VOCs	SVOCs	BTEX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids		Waste Characterization		
14021304-201	2396-4-B01-2	2/27	2:20	S	X							X	X	X				9-9
202	2396-4-B02-2		2:05															"
203	2396-4-B03-2		1:50															"
204	2396-4-B03-2 dup		1:55															"
205	2396-4-B04-2		1:40															"
206	2396-4-B05-2		1:30															"
207	2396-4-B06-2		12:37															"
208	2396-4-B07-2		12:15															"
209	2396-4-B08-2		12:00															"
210	2396-4-B09-2		11:45	S	X							X	X	X				"

Relinquished by: <u>[Signature]</u>	Date/Time: <u>2/28 8:43</u>	Received by: <u>Stephane Hayne</u>	Date/Time: <u>2/28/14 8:46</u>
Relinquished by: <u>[Signature]</u>	Date/Time: _____	Received by: _____	Date/Time: _____
Relinquished by: _____	Date/Time: _____	Received by: _____	Date/Time: _____

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



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: FAP 525 (US Route 20) Office Phone Number, if available: _____

Physical Site Location (address, including number and street):
44 W 452 US 20

City: Unincorporated State: IL Zip Code: 60140

County: Kane Township: Hampshire

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

Latitude: 42.09873 Longitude: -88.48025
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: _____

PO Box: _____

City: Schaumburg State: IL

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4101

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

Project Name: FAP 525 (US Route 20)
 Latitude: 42.09873 Longitude: -88.48025

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

LOCATIONS 2396-8-B01 THROUGH -B05, AND -B07 WERE SAMPLED ADJACENT TO ISGS SITE 2396V-8. SEE FIGURES 3 AND 4, AND TABLE 3e OF THE REVISED PRELIMINARY SITE INVESTIGATION.

- 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 ANALYTICAL REPORT - WORK ORDER NUMBERS: 13101300 and 14021328

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

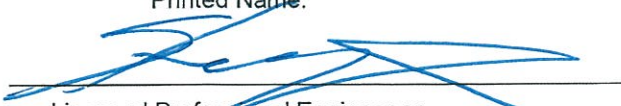
I, Steven Gobelman, P.E., L.P.G. (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance 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

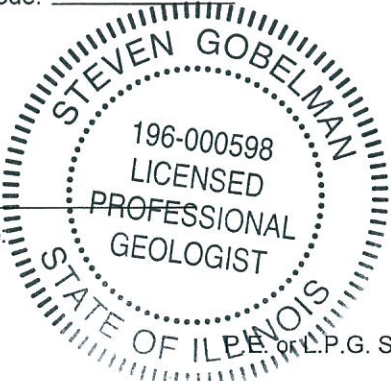
Steven Gobelman

Printed Name:


 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

8/23/14

Date:



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
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl Acetate
Vinyl Chloride
Xylenes, total
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 2396V-8

SKS Service Construction Supply

Sample ID	2396-8-B01-1	2396-8-B01-2	2396-8-B02-1	2396-8-B02-2	2396-8-B03-1	2396-8-B03-2	¹ Most Stringent MAC	² Outside a Populated Area MAC	³ Populated non-Metropolitan Statistical Area MAC	⁴ Within Chicago Corporate Limits MAC	⁵ Metropolitan Statistical Area MAC	⁶ Class I Soil TCLP/SPLP Comparisons Only
Sample Depth (ft)	0-6	6-14	0-6	6-14	0-6	6-14						
Sample Date	10/24/2013	2/27/2014	10/24/2013	2/27/2014	10/24/2013	2/27/2014						
PID	0	0	0	0	0	0						
Sample pH	7.44	8.6	8.39	8.39	8.42	8.39						
Matrix	Soil	Soil	Soil	Soil	Soil	Soil						
Inorganic Compounds, Total (mg/kg)												
Arsenic	9.73	3.76	10.8	3.05	4.54	3.94	11.3	NA	11.3	NA	13	NA

Sample ID	2396-8-B04	2396-8-B05-1	2396-8-B05-2	2396-8-B07	2396-8-B07 DUP	¹ Most Stringent MAC	² Outside a Populated Area MAC	³ Populated non-Metropolitan Statistical Area MAC	⁴ Within Chicago Corporate Limits MAC	⁵ Metropolitan Statistical Area MAC	⁶ Class I Soil TCLP/SPLP Comparisons Only	
Sample Depth (ft)	0-6	0-6	6-14	0-6	0-6							
Sample Date	10/24/2013	10/24/2013	2/27/2014	10/24/2013	10/24/2013							
PID	0	0	0	0	0							
Sample pH	8.76	8.14	8.39	7.98	8.03							
Matrix	Soil	Soil	Soil	Soil	Soil							
Inorganic Compounds, Total (mg/kg)												
Arsenic	4.62	7.35	4.16	11.8	1.3	9.92	11.3	NA	11.3	NA	13	NA

November 05, 2013

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



RE: IDOT2013-033

WorkOrder: 13101300

Dear Colleen Grey:

TEKLAB, INC received 8 samples on 10/25/2013 9:10:00 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
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

This reporting package includes the following:

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Chain of Custody	Appended

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

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: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Cooler Receipt Temp: 4.4 °C

Locations and Accreditations

	<u>Collinsville</u>	<u>Springfield</u>	<u>Kansas City</u>	<u>Collinsville Air</u>
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	3920 Pintail Dr Springfield, IL 62711-9415	8421 Nieman Road Lenexa, KS 66214	5445 Horseshoe Lake Road 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

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

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-001

Client Sample ID: 2396-8-B01

Matrix: SOLID

Collection Date: 10/24/2013 9:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		18.7	%	1	10/25/2013 15:39	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		81.3	%	1	10/25/2013 15:39	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.44		1	10/25/2013 20:02	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02	J	0.0097	mg/L	1	11/01/2013 12:06	93275
Manganese	NELAP	0.0016	0.005		0.041	mg/L	1	11/01/2013 12:06	93275
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.36	mg/L	1	10/29/2013 17:49	93144
Beryllium	NELAP	0.0003	0.001	J	0.0008	mg/L	1	10/29/2013 17:49	93144
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 17:49	93144
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 17:49	93144
Chromium	NELAP	0.004	0.01		0.0432	mg/L	1	10/29/2013 17:49	93144
Cobalt	NELAP	0.0022	0.01	J	0.0056	mg/L	1	10/29/2013 17:49	93144
Iron	NELAP	0.007	0.02	X	40.5	mg/L	1	10/29/2013 17:49	93144
Lead	NELAP	0.006	0.007		0.007	mg/L	1	10/30/2013 12:32	93144
Manganese	NELAP	0.0016	0.005	X	0.16	mg/L	1	10/29/2013 17:49	93144
Nickel	NELAP	0.0033	0.01		0.0263	mg/L	1	10/29/2013 17:49	93144
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 17:49	93144
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 17:49	93144
Zinc	NELAP	0.0021	0.01		0.0885	mg/L	1	10/29/2013 17:49	93144
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	10/30/2013 15:05	93146
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 18:03	93146
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002	J	0.00006	mg/L	1	10/29/2013 15:33	93154
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.45	4.72		< 4.72	mg/Kg-dry	1	10/29/2013 23:43	93118
Arsenic	NELAP	1.14	2.27		9.73	mg/Kg-dry	1	10/29/2013 12:14	93107
Barium	NELAP	0.23	0.45		182	mg/Kg-dry	1	10/29/2013 12:14	93107
Beryllium	NELAP	0.05	0.09		0.86	mg/Kg-dry	1	10/29/2013 12:14	93107
Boron	NELAP	0.91	1.82		5.3	mg/Kg-dry	1	10/29/2013 12:14	93107
Cadmium	NELAP	0.09	0.18	J	0.09	mg/Kg-dry	1	10/29/2013 12:14	93107
Calcium	NELAP	2.27	4.55		4040	mg/Kg-dry	1	10/29/2013 12:14	93107
Chromium	NELAP	0.45	0.91	X	27	mg/Kg-dry	1	10/29/2013 12:14	93107
Cobalt	NELAP	0.45	0.91		11.2	mg/Kg-dry	1	10/29/2013 12:14	93107
Copper	NELAP	0.45	0.91		16.4	mg/Kg-dry	1	10/29/2013 12:14	93107
Iron	NELAP	0.91	1.82	BX	26000	mg/Kg-dry	1	10/29/2013 12:14	93107
Lead	NELAP	1.82	3.64		12.8	mg/Kg-dry	1	10/29/2013 12:14	93107
Magnesium	NELAP	0.45	0.91	B	4810	mg/Kg-dry	1	10/29/2013 12:14	93107
Manganese	NELAP	0.23	0.45	X	820	mg/Kg-dry	1	10/29/2013 12:14	93107
Nickel	NELAP	0.45	0.91		30.9	mg/Kg-dry	1	10/29/2013 12:14	93107
Potassium	NELAP	4.55	9.09		2060	mg/Kg-dry	1	10/29/2013 12:14	93107
Silver	NELAP	0.45	0.5		< 0.5	mg/Kg-dry	1	10/29/2013 12:14	93107
Sodium	NELAP	2.27	4.55		683	mg/Kg-dry	1	10/29/2013 12:14	93107



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-001

Client Sample ID: 2396-8-B01

Matrix: SOLID

Collection Date: 10/24/2013 9:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Thallium	NELAP	2.27	2.36		< 2.36	mg/Kg-dry	1	10/29/2013 12:14	93107
Vanadium	NELAP	0.45	0.91		42.6	mg/Kg-dry	1	10/29/2013 12:14	93107
Zinc	NELAP	0.45	0.91		55.9	mg/Kg-dry	1	10/29/2013 12:14	93107
<i>Sample results for Fe and Mg exceed 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.337	0.577		< 0.577	mg/Kg-dry	1	10/31/2013 11:03	93116
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.035	mg/Kg-dry	1	10/29/2013 12:45	93155
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.164	0.615		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
1,2-Dichlorobenzene	NELAP	0.196	0.615		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
1,3-Dichlorobenzene	NELAP	0.207	0.615		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
1,4-Dichlorobenzene	NELAP	0.196	0.615		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
2,4,5-Trichlorophenol	NELAP	0.117	0.431	R	ND	mg/Kg-dry	1	11/02/2013 11:21	93178
2,4,6-Trichlorophenol	NELAP	0.155	0.431	R	ND	mg/Kg-dry	1	11/02/2013 11:21	93178
2,4-Dichlorophenol	NELAP	0.149	0.615		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
2,4-Dimethylphenol	NELAP	0.156	0.615	R	ND	mg/Kg-dry	1	11/02/2013 11:21	93178
2,4-Dinitrophenol	NELAP	0.132	1.23	R	ND	mg/Kg-dry	1	11/02/2013 11:21	93178
2,4-Dinitrotoluene	NELAP	0.128	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
2,6-Dinitrotoluene	NELAP	0.133	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
2-Chloronaphthalene	NELAP	0.148	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
2-Chlorophenol	NELAP	0.156	0.615	R	ND	mg/Kg-dry	1	11/02/2013 11:21	93178
2-Methylnaphthalene	NELAP	0.146	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
2-Nitroaniline	NELAP	0.112	1.23		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
2-Nitrophenol	NELAP	0.138	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
3,3'-Dichlorobenzidine	NELAP	0.246	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
3-Nitroaniline	NELAP	0.101	1.23		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
4,6-Dinitro-2-methylphenol	NELAP	0.133	1.23		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
4-Bromophenyl phenyl ether	NELAP	0.113	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
4-Chloro-3-methylphenol	NELAP	0.135	0.615	R	ND	mg/Kg-dry	1	11/02/2013 11:21	93178
4-Chloroaniline	NELAP	0.149	0.615		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
4-Chlorophenyl phenyl ether	NELAP	0.122	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
4-Nitroaniline	NELAP	0.112	0.615		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
4-Nitrophenol	NELAP	0.121	0.431	R	ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Acenaphthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Acenaphthylene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Benzo(a)anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Benzo(a)pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Benzo(b)fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Benzo(g,h,i)perylene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Benzo(k)fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Bis(2-chloroethoxy)methane	NELAP	0.144	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Bis(2-chloroethyl)ether	NELAP	0.175	0.615		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Bis(2-chloroisopropyl)ether	NELAP	0.14	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Bis(2-ethylhexyl)phthalate	NELAP	0.144	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-001

Client Sample ID: 2396-8-B01

Matrix: SOLID

Collection Date: 10/24/2013 9:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Butyl benzyl phthalate	NELAP	0.124	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Carbazole		0.15	0.615		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Chrysene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Dibenzo(a,h)anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Dibenzofuran	NELAP	0.155	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Diethyl phthalate	NELAP	0.118	0.615		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Dimethyl phthalate	NELAP	0.112	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Di-n-butyl phthalate	NELAP	0.127	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Di-n-octyl phthalate	NELAP	0.128	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Fluorene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Hexachlorobenzene	NELAP	0.121	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Hexachlorobutadiene	NELAP	0.191	0.615		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Hexachlorocyclopentadiene	NELAP	0.126	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Hexachloroethane	NELAP	0.206	0.615		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Indeno(1,2,3-cd)pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Isophorone	NELAP	0.145	0.431		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
m,p-Cresol	NELAP	0.155	0.615	R	ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Naphthalene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Nitrobenzene	NELAP	0.154	0.615		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
N-Nitroso-di-n-propylamine	NELAP	0.135	0.615		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
N-Nitrosodiphenylamine	NELAP	0.113	0.615		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
o-Cresol	NELAP	0.145	0.615	R	ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Pentachlorophenol	NELAP	0.812	2.46	R	ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Phenanthrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Phenol	NELAP	0.143	0.431	R	ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 11:21	93178
Surr: 2,4,6-Tribromophenol		0	32.7-130		65.8	%REC	1	11/02/2013 11:21	93178
Surr: 2-Fluorobiphenyl		0	34.1-116		66	%REC	1	11/02/2013 11:21	93178
Surr: 2-Fluorophenol		0	30.5-99		66.4	%REC	1	11/02/2013 11:21	93178
Surr: Nitrobenzene-d5		0	34.1-101		64.5	%REC	1	11/02/2013 11:21	93178
Surr: Phenol-d5		0	34.9-110		73.1	%REC	1	11/02/2013 11:21	93178
Surr: p-Terphenyl-d14		0	41.7-124		75.2	%REC	1	11/02/2013 11:21	93178

RPD for MS/MSD was outside of QC limit due to sample composition.

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
1,1,1,2-Tetrachloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
1,1,2-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
1,1-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
1,1-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
1,2-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
1,2-Dichloropropane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
1,3-Dichloropropene, Total		0.001	0.004		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
2-Butanone	NELAP	0.0098	0.049		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
2-Hexanone	NELAP	0.0098	0.049		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
4-Methyl-2-pentanone	NELAP	0.0098	0.049		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Acetone	NELAP	0.0098	0.049		0.059	mg/Kg-dry	1	10/28/2013 20:50	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-001

Client Sample ID: 2396-8-B01

Matrix: SOLID

Collection Date: 10/24/2013 9:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Benzene	NELAP	0.0005	0.001		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Bromodichloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Bromoform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Bromomethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Carbon disulfide	NELAP	0.0029	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Carbon tetrachloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Chlorobenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Chloroethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Chloroform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Chloromethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
cis-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
cis-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Dibromochloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Ethylbenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
m,p-Xylenes	NELAP	0.001	0.005	J	0.001	mg/Kg-dry	1	10/28/2013 20:50	93156
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Methylene chloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
o-Xylene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Styrene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Tetrachloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Toluene	NELAP	0.001	0.005	J	0.002	mg/Kg-dry	1	10/28/2013 20:50	93156
trans-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
trans-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Trichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Vinyl acetate	NELAP	0.0196	0.049		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 20:50	93156
Xylenes, Total	NELAP	0.001	0.005	J	0.001	mg/Kg-dry	1	10/28/2013 20:50	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		90	%REC	1	10/28/2013 20:50	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		95.8	%REC	1	10/28/2013 20:50	93156
Surr: Dibromofluoromethane		0	77.7-120		93.3	%REC	1	10/28/2013 20:50	93156
Surr: Toluene-d8		0	86-116		100.1	%REC	1	10/28/2013 20:50	93156

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-002

Client Sample ID: 2396-8-B02

Matrix: SOLID

Collection Date: 10/24/2013 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		6.7	%	1	10/25/2013 15:39	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		93.3	%	1	10/25/2013 15:39	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.39		1	10/25/2013 20:08	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02	J	0.0116	mg/L	1	11/01/2013 12:12	93275
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0685	mg/L	1	10/29/2013 17:53	93144
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 17:53	93144
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 17:53	93144
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 17:53	93144
Chromium	NELAP	0.004	0.01	J	0.0079	mg/L	1	10/29/2013 17:53	93144
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 17:53	93144
Iron	NELAP	0.007	0.02	X	5.77	mg/L	1	10/29/2013 17:53	93144
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 17:53	93144
Manganese	NELAP	0.0016	0.005		0.0274	mg/L	1	10/29/2013 17:53	93144
Nickel	NELAP	0.0033	0.01	J	0.0047	mg/L	1	10/29/2013 17:53	93144
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 17:53	93144
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 17:53	93144
Zinc	NELAP	0.0021	0.01		0.018	mg/L	1	10/29/2013 17:53	93144
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	10/30/2013 15:09	93146
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 18:06	93146
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 15:36	93154
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.41	4.63		< 4.63	mg/Kg-dry	1	10/29/2013 23:49	93118
Arsenic	NELAP	1.2	2.4		10.8	mg/Kg-dry	1	10/29/2013 12:20	93107
Barium	NELAP	0.24	0.48		110	mg/Kg-dry	1	10/29/2013 12:20	93107
Beryllium	NELAP	0.05	0.1		0.88	mg/Kg-dry	1	10/29/2013 12:20	93107
Boron	NELAP	0.96	1.92		6.85	mg/Kg-dry	1	10/29/2013 12:20	93107
Cadmium	NELAP	0.1	0.19		< 0.19	mg/Kg-dry	1	10/29/2013 12:20	93107
Calcium	NELAP	2.4	4.81		3030	mg/Kg-dry	1	10/29/2013 12:20	93107
Chromium	NELAP	0.48	0.96	X	25.2	mg/Kg-dry	1	10/29/2013 12:20	93107
Cobalt	NELAP	0.48	0.96		8.47	mg/Kg-dry	1	10/29/2013 12:20	93107
Copper	NELAP	0.48	0.96		27.9	mg/Kg-dry	1	10/29/2013 12:20	93107
Iron	NELAP	0.96	1.92	BX	27600	mg/Kg-dry	1	10/29/2013 12:20	93107
Lead	NELAP	1.92	3.85		11.8	mg/Kg-dry	1	10/29/2013 12:20	93107
Magnesium	NELAP	0.48	0.96	B	4810	mg/Kg-dry	1	10/29/2013 12:20	93107
Manganese	NELAP	0.24	0.48		498	mg/Kg-dry	1	10/29/2013 12:20	93107
Nickel	NELAP	0.48	0.96		38.8	mg/Kg-dry	1	10/29/2013 12:20	93107
Potassium	NELAP	4.81	9.62		2230	mg/Kg-dry	1	10/29/2013 12:20	93107
Silver	NELAP	0.48	0.53		< 0.53	mg/Kg-dry	1	10/29/2013 12:20	93107
Sodium	NELAP	2.4	4.81		81	mg/Kg-dry	1	10/29/2013 12:20	93107
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	10/29/2013 12:20	93107



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-002

Client Sample ID: 2396-8-B02

Matrix: SOLID

Collection Date: 10/24/2013 9:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.48	0.96		38.9	mg/Kg-dry	1	10/29/2013 12:20	93107
Zinc	NELAP	0.48	0.96		54.8	mg/Kg-dry	1	10/29/2013 12:20	93107
<i>Sample results for Fe and Mg exceed 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume 1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.318	0.545		< 0.545	mg/Kg-dry	1	10/31/2013 13:52	93116
SW-846 7471B									
Mercury	NELAP	0.003	0.01		0.025	mg/Kg-dry	1	10/29/2013 12:47	93155
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.14	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
1,2-Dichlorobenzene	NELAP	0.168	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
1,3-Dichlorobenzene	NELAP	0.177	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
1,4-Dichlorobenzene	NELAP	0.168	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
2,4,5-Trichlorophenol	NELAP	0.1	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
2,4,6-Trichlorophenol	NELAP	0.133	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
2,4-Dichlorophenol	NELAP	0.128	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
2,4-Dimethylphenol	NELAP	0.134	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
2,4-Dinitrophenol	NELAP	0.113	1.06		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
2,4-Dinitrotoluene	NELAP	0.11	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
2,6-Dinitrotoluene	NELAP	0.114	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
2-Chloronaphthalene	NELAP	0.127	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
2-Chlorophenol	NELAP	0.134	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
2-Methylnaphthalene	NELAP	0.126	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
2-Nitroaniline	NELAP	0.096	1.06		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
2-Nitrophenol	NELAP	0.118	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
3,3'-Dichlorobenzidine	NELAP	0.211	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
3-Nitroaniline	NELAP	0.087	1.06		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
4,6-Dinitro-2-methylphenol	NELAP	0.114	1.06		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
4-Bromophenyl phenyl ether	NELAP	0.097	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
4-Chloro-3-methylphenol	NELAP	0.116	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
4-Chloroaniline	NELAP	0.128	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
4-Chlorophenyl phenyl ether	NELAP	0.105	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
4-Nitroaniline	NELAP	0.096	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
4-Nitrophenol	NELAP	0.103	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Acenaphthene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Acenaphthylene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Anthracene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Benzo(a)anthracene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Benzo(a)pyrene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Benzo(b)fluoranthene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Benzo(g,h,i)perylene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Benzo(k)fluoranthene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Bis(2-chloroethoxy)methane	NELAP	0.124	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Bis(2-chloroethyl)ether	NELAP	0.15	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Bis(2-chloroisopropyl)ether	NELAP	0.12	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Bis(2-ethylhexyl)phthalate	NELAP	0.124	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Butyl benzyl phthalate	NELAP	0.107	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-002

Client Sample ID: 2396-8-B02

Matrix: SOLID

Collection Date: 10/24/2013 9:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbazole		0.129	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Chrysene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Dibenzo(a,h)anthracene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Dibenzofuran	NELAP	0.133	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Diethyl phthalate	NELAP	0.101	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Dimethyl phthalate	NELAP	0.096	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Di-n-butyl phthalate	NELAP	0.109	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Di-n-octyl phthalate	NELAP	0.11	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Fluoranthene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Fluorene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Hexachlorobenzene	NELAP	0.103	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Hexachlorobutadiene	NELAP	0.164	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Hexachlorocyclopentadiene	NELAP	0.108	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Hexachloroethane	NELAP	0.176	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Isophorone	NELAP	0.125	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
m,p-Cresol	NELAP	0.133	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Naphthalene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Nitrobenzene	NELAP	0.132	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
N-Nitroso-di-n-propylamine	NELAP	0.116	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
N-Nitrosodiphenylamine	NELAP	0.097	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
o-Cresol	NELAP	0.125	0.528		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Pentachlorophenol	NELAP	0.697	2.11		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Phenanthrene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Phenol	NELAP	0.122	0.37		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Pyrene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:01	93178
Surr: 2,4,6-Tribromophenol		0	32.7-130		69.2	%REC	1	11/02/2013 13:01	93178
Surr: 2-Fluorobiphenyl		0	34.1-116		73	%REC	1	11/02/2013 13:01	93178
Surr: 2-Fluorophenol		0	30.5-99		64.6	%REC	1	11/02/2013 13:01	93178
Surr: Nitrobenzene-d5		0	34.1-101		69.6	%REC	1	11/02/2013 13:01	93178
Surr: Phenol-d5		0	34.9-110		72.9	%REC	1	11/02/2013 13:01	93178
Surr: p-Terphenyl-d14		0	41.7-124		82.7	%REC	1	11/02/2013 13:01	93178

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
1,1,2,2-Tetrachloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
1,1,2-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
1,1-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
1,1-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
1,2-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
1,2-Dichloropropane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
1,3-Dichloropropane, Total		0.001	0.004		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
2-Butanone	NELAP	0.0097	0.049	J	0.012	mg/Kg-dry	1	10/28/2013 21:16	93156
2-Hexanone	NELAP	0.0097	0.049		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
4-Methyl-2-pentanone	NELAP	0.0097	0.049		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Acetone	NELAP	0.0097	0.049		0.052	mg/Kg-dry	1	10/28/2013 21:16	93156
Benzene	NELAP	0.0005	0.001		0.005	mg/Kg-dry	1	10/28/2013 21:16	93156
Bromodichloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-002

Client Sample ID: 2396-8-B02

Matrix: SOLID

Collection Date: 10/24/2013 9:35

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromoform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Bromomethane	NELAP	0.0019	0.01		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Carbon disulfide	NELAP	0.0029	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Carbon tetrachloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Chlorobenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Chloroethane	NELAP	0.0019	0.01		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Chloroform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Chloromethane	NELAP	0.0019	0.01		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
cis-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
cis-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Dibromochloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Ethylbenzene	NELAP	0.001	0.005	J	0.003	mg/Kg-dry	1	10/28/2013 21:16	93156
m,p-Xylenes	NELAP	0.001	0.005		0.005	mg/Kg-dry	1	10/28/2013 21:16	93156
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Methylene chloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
o-Xylene	NELAP	0.001	0.005	J	0.002	mg/Kg-dry	1	10/28/2013 21:16	93156
Styrene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Tetrachloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Toluene	NELAP	0.001	0.005		0.009	mg/Kg-dry	1	10/28/2013 21:16	93156
trans-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
trans-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Trichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Vinyl acetate	NELAP	0.0195	0.049		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 21:16	93156
Xylenes, Total	NELAP	0.001	0.005		0.007	mg/Kg-dry	1	10/28/2013 21:16	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		88.5	%REC	1	10/28/2013 21:16	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		98	%REC	1	10/28/2013 21:16	93156
Surr: Dibromofluoromethane		0	77.7-120		94.9	%REC	1	10/28/2013 21:16	93156
Surr: Toluene-d8		0	86-116		99.9	%REC	1	10/28/2013 21:16	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-003

Client Sample ID: 2396-8-B03

Matrix: SOLID

Collection Date: 10/24/2013 9:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		7.2	%	1	10/25/2013 15:40	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		92.8	%	1	10/25/2013 15:40	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.42		1	10/25/2013 20:11	R183256
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0704	mg/L	1	10/29/2013 17:56	93144
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	10/29/2013 17:56	93144
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 17:56	93144
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 17:56	93144
Chromium	NELAP	0.004	0.01	J	0.005	mg/L	1	10/29/2013 17:56	93144
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	10/29/2013 17:56	93144
Iron	NELAP	0.007	0.02		3.92	mg/L	1	10/29/2013 17:56	93144
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	10/29/2013 17:56	93144
Manganese	NELAP	0.0016	0.005		0.0198	mg/L	1	10/29/2013 17:56	93144
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	10/29/2013 17:56	93144
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 17:56	93144
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 17:56	93144
Zinc	NELAP	0.0021	0.01		0.0154	mg/L	1	10/29/2013 17:56	93144
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	10/30/2013 15:13	93146
Thallium, SPLP by GFAA	NELAP	0.0005	0.002	J	0.0005	mg/L	1	10/30/2013 18:10	93146
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	10/29/2013 15:42	93154
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.6	5		< 5	mg/Kg-dry	1	10/29/2013 23:55	93118
Arsenic	NELAP	1.14	2.27		4.54	mg/Kg-dry	1	10/29/2013 12:26	93107
Barium	NELAP	0.23	0.45		66.3	mg/Kg-dry	1	10/29/2013 12:26	93107
Beryllium	NELAP	0.05	0.09		0.45	mg/Kg-dry	1	10/29/2013 12:26	93107
Boron	NELAP	0.91	1.82		9.66	mg/Kg-dry	1	10/29/2013 12:26	93107
Cadmium	NELAP	0.09	0.18		< 0.18	mg/Kg-dry	1	10/29/2013 12:26	93107
Calcium	NELAP	2.27	4.55		87100	mg/Kg-dry	1	10/29/2013 12:26	93107
Chromium	NELAP	0.45	0.91	X	13.9	mg/Kg-dry	1	10/29/2013 12:26	93107
Cobalt	NELAP	0.45	0.91		6.26	mg/Kg-dry	1	10/29/2013 12:26	93107
Copper	NELAP	0.45	0.91		13.6	mg/Kg-dry	1	10/29/2013 12:26	93107
Iron	NELAP	0.91	1.82	B	14600	mg/Kg-dry	1	10/29/2013 12:26	93107
Lead	NELAP	1.82	3.64		11.5	mg/Kg-dry	1	10/29/2013 12:26	93107
Magnesium	NELAP	0.45	0.91	B	40500	mg/Kg-dry	1	10/29/2013 12:26	93107
Manganese	NELAP	0.23	0.45		383	mg/Kg-dry	1	10/29/2013 12:26	93107
Nickel	NELAP	0.45	0.91		15.5	mg/Kg-dry	1	10/29/2013 12:26	93107
Potassium	NELAP	4.55	9.09		2150	mg/Kg-dry	1	10/29/2013 12:26	93107
Silver	NELAP	0.45	0.5		< 0.5	mg/Kg-dry	1	10/29/2013 12:26	93107
Sodium	NELAP	2.27	4.55		150	mg/Kg-dry	1	10/29/2013 12:26	93107
Thallium	NELAP	2.27	2.36		< 2.36	mg/Kg-dry	1	10/29/2013 12:26	93107
Vanadium	NELAP	0.45	0.91		19.7	mg/Kg-dry	1	10/29/2013 12:26	93107
Zinc	NELAP	0.45	0.91		34.9	mg/Kg-dry	1	10/29/2013 12:26	93107



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-003

Client Sample ID: 2396-8-B03

Matrix: SOLID

Collection Date: 10/24/2013 9:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
<i>Sample results for Fe and Mg exceed 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.337	0.577		< 0.577	mg/Kg-dry	1	10/31/2013 11:17	93116
SW-846 7471B									
Mercury	NELAP	0.003	0.01		0.012	mg/Kg-dry	1	10/29/2013 12:49	93155
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	11/02/2013 13:34	93178
1,2-Dichlorobenzene	NELAP	0.17	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
1,3-Dichlorobenzene	NELAP	0.18	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
1,4-Dichlorobenzene	NELAP	0.17	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
2,4,5-Trichlorophenol	NELAP	0.102	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
2,4,6-Trichlorophenol	NELAP	0.135	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
2,4-Dichlorophenol	NELAP	0.13	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
2,4-Dimethylphenol	NELAP	0.136	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
2,4-Dinitrophenol	NELAP	0.115	1.07		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
2,4-Dinitrotoluene	NELAP	0.111	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
2,6-Dinitrotoluene	NELAP	0.116	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
2-Chloronaphthalene	NELAP	0.129	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
2-Chlorophenol	NELAP	0.136	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
2-Methylnaphthalene	NELAP	0.127	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
2-Nitroaniline	NELAP	0.097	1.07		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
2-Nitrophenol	NELAP	0.12	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
3,3'-Dichlorobenzidine	NELAP	0.214	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
3-Nitroaniline	NELAP	0.088	1.07		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
4,6-Dinitro-2-methylphenol	NELAP	0.116	1.07		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
4-Bromophenyl phenyl ether	NELAP	0.099	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
4-Chloro-3-methylphenol	NELAP	0.118	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
4-Chloroaniline	NELAP	0.13	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
4-Chlorophenyl phenyl ether	NELAP	0.106	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
4-Nitroaniline	NELAP	0.097	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
4-Nitrophenol	NELAP	0.105	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Acenaphthene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Acenaphthylene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Anthracene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Benzo(a)anthracene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Benzo(a)pyrene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Benzo(b)fluoranthene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Benzo(g,h,i)perylene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Benzo(k)fluoranthene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Bis(2-chloroethoxy)methane	NELAP	0.125	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Bis(2-chloroethyl)ether	NELAP	0.152	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Bis(2-chloroisopropyl)ether	NELAP	0.122	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Bis(2-ethylhexyl)phthalate	NELAP	0.125	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Butyl benzyl phthalate	NELAP	0.108	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Carbazole		0.131	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Chrysene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:34	93178

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-003

Client Sample ID: 2396-8-B03

Matrix: SOLID

Collection Date: 10/24/2013 9:20

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	11/02/2013 13:34	93178
Dibenzofuran	NELAP	0.135	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Diethyl phthalate	NELAP	0.103	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Dimethyl phthalate	NELAP	0.097	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Di-n-butyl phthalate	NELAP	0.11	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Di-n-octyl phthalate	NELAP	0.111	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Fluoranthene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Fluorene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Hexachlorobenzene	NELAP	0.105	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Hexachlorobutadiene	NELAP	0.166	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Hexachlorocyclopentadiene	NELAP	0.109	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Hexachloroethane	NELAP	0.179	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Isophorone	NELAP	0.126	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
m,p-Cresol	NELAP	0.135	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Naphthalene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Nitrobenzene	NELAP	0.134	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
N-Nitroso-di-n-propylamine	NELAP	0.118	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
N-Nitrosodiphenylamine	NELAP	0.099	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
o-Cresol	NELAP	0.126	0.535		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Pentachlorophenol	NELAP	0.707	2.14		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Phenanthrene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Phenol	NELAP	0.124	0.375		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Pyrene	NELAP	0.018	0.036		ND	mg/Kg-dry	1	11/02/2013 13:34	93178
Surr: 2,4,6-Tribromophenol		0	32.7-130		65.5	%REC	1	11/02/2013 13:34	93178
Surr: 2-Fluorobiphenyl		0	34.1-116		63.5	%REC	1	11/02/2013 13:34	93178
Surr: 2-Fluorophenol		0	30.5-99		58.6	%REC	1	11/02/2013 13:34	93178
Surr: Nitrobenzene-d5		0	34.1-101		60	%REC	1	11/02/2013 13:34	93178
Surr: Phenol-d5		0	34.9-110		66.2	%REC	1	11/02/2013 13:34	93178
Surr: p-Terphenyl-d14		0	41.7-124		77.6	%REC	1	11/02/2013 13:34	93178
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
1,1,1,2-Tetrachloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
1,1,2-Trichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
1,1-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
1,1-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
1,2-Dichloroethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
1,2-Dichloropropane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
1,3-Dichloropropene, Total		0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
2-Butanone	NELAP	0.0092	0.046		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
2-Hexanone	NELAP	0.0092	0.046		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
4-Methyl-2-pentanone	NELAP	0.0092	0.046		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Acetone	NELAP	0.0092	0.046	J	0.041	mg/Kg-dry	1	10/28/2013 21:43	93156
Benzene	NELAP	0.0005	0.001		0.004	mg/Kg-dry	1	10/28/2013 21:43	93156
Bromodichloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Bromoform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Bromomethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/28/2013 21:43	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-003

Client Sample ID: 2396-8-B03

Matrix: SOLID

Collection Date: 10/24/2013 9:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbon disulfide	NELAP	0.0028	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Carbon tetrachloride	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Chlorobenzene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Chloroethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Chloroform	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Chloromethane	NELAP	0.0018	0.009		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
cis-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
cis-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Dibromochloromethane	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Ethylbenzene	NELAP	0.0009	0.005	J	0.003	mg/Kg-dry	1	10/28/2013 21:43	93156
m,p-Xylenes	NELAP	0.0009	0.005	J	0.004	mg/Kg-dry	1	10/28/2013 21:43	93156
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Methylene chloride	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
o-Xylene	NELAP	0.0009	0.005	J	0.002	mg/Kg-dry	1	10/28/2013 21:43	93156
Styrene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Tetrachloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Toluene	NELAP	0.0009	0.005		0.006	mg/Kg-dry	1	10/28/2013 21:43	93156
trans-1,2-Dichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
trans-1,3-Dichloropropene	NELAP	0.0009	0.004		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Trichloroethene	NELAP	0.0009	0.005		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Vinyl acetate	NELAP	0.0184	0.046		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 21:43	93156
Xylenes, Total	NELAP	0.0009	0.005		0.006	mg/Kg-dry	1	10/28/2013 21:43	93156
Surr: 1,2-Dichloroethane-d4			0 72.2-131		90.1	%REC	1	10/28/2013 21:43	93156
Surr: 4-Bromofluorobenzene			0 82.1-116		95.8	%REC	1	10/28/2013 21:43	93156
Surr: Dibromofluoromethane			0 77.7-120		96	%REC	1	10/28/2013 21:43	93156
Surr: Toluene-d8			0 86-116		99.6	%REC	1	10/28/2013 21:43	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-004

Client Sample ID: 2396-8-B04

Matrix: SOLID

Collection Date: 10/24/2013 9:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		10.8	%	1	10/25/2013 15:40	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		89.2	%	1	10/25/2013 15:40	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.76		1	10/25/2013 20:13	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	11/01/2013 12:20	93275
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	11/01/2013 12:20	93275
Manganese	NELAP	0.0016	0.005		0.858	mg/L	1	11/01/2013 12:20	93275
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.317	mg/L	1	10/29/2013 18:00	93144
Beryllium	NELAP	0.0003	0.001		0.0015	mg/L	1	10/29/2013 18:00	93144
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 18:00	93144
Cadmium	NELAP	0.0003	0.002	J	0.0003	mg/L	1	10/29/2013 18:00	93144
Chromium	NELAP	0.004	0.01		0.0578	mg/L	1	10/29/2013 18:00	93144
Cobalt	NELAP	0.0022	0.01		0.0167	mg/L	1	10/29/2013 18:00	93144
Iron	NELAP	0.007	0.02	X	53.7	mg/L	1	10/29/2013 18:00	93144
Lead	NELAP	0.006	0.007	X	0.0189	mg/L	1	10/29/2013 18:00	93144
Manganese	NELAP	0.0016	0.005	X	0.424	mg/L	1	10/29/2013 18:00	93144
Nickel	NELAP	0.0033	0.01		0.0588	mg/L	1	10/29/2013 18:00	93144
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 18:00	93144
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 18:00	93144
Zinc	NELAP	0.0021	0.01		0.147	mg/L	1	10/29/2013 18:00	93144
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	10/30/2013 15:24	93146
Thallium, SPLP by GFAA	NELAP	0.0005	0.002	J	0.0007	mg/L	1	10/30/2013 18:20	93146
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002	J	0.0001	mg/L	1	10/29/2013 15:45	93154
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	10/30/2013 0:13	93118
Arsenic	NELAP	1.18	2.36		4.62	mg/Kg-dry	1	10/29/2013 12:32	93107
Barium	NELAP	0.24	0.47		40.6	mg/Kg-dry	1	10/29/2013 12:32	93107
Beryllium	NELAP	0.05	0.09		0.47	mg/Kg-dry	1	10/29/2013 12:32	93107
Boron	NELAP	0.94	1.89		10.9	mg/Kg-dry	1	10/29/2013 12:32	93107
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	10/29/2013 12:32	93107
Calcium	NELAP	2.36	4.72	S	84800	mg/Kg-dry	1	10/29/2013 12:32	93107
Chromium	NELAP	0.47	0.94	X	14.7	mg/Kg-dry	1	10/29/2013 12:32	93107
Cobalt	NELAP	0.47	0.94		6.13	mg/Kg-dry	1	10/29/2013 12:32	93107
Copper	NELAP	0.47	0.94		13.8	mg/Kg-dry	1	10/29/2013 12:32	93107
Iron	NELAP	0.94	1.89	BS	15000	mg/Kg-dry	1	10/29/2013 12:32	93107
Lead	NELAP	1.89	3.77		9.32	mg/Kg-dry	1	10/29/2013 12:32	93107
Magnesium	NELAP	0.47	0.94	BS	35400	mg/Kg-dry	1	10/29/2013 12:32	93107
Manganese	NELAP	0.24	0.47	S	354	mg/Kg-dry	1	10/29/2013 12:32	93107
Nickel	NELAP	0.47	0.94		16.3	mg/Kg-dry	1	10/29/2013 12:32	93107
Potassium	NELAP	4.72	9.43	S	2470	mg/Kg-dry	1	10/29/2013 12:32	93107
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	10/29/2013 12:32	93107

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-004

Client Sample ID: 2396-8-B04

Matrix: SOLID

Collection Date: 10/24/2013 9:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Sodium	NELAP	2.36	4.72	S	1210	mg/Kg-dry	1	10/29/2013 12:32	93107
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	10/29/2013 12:32	93107
Vanadium	NELAP	0.47	0.94		21.2	mg/Kg-dry	1	10/29/2013 12:32	93107
Zinc	NELAP	0.47	0.94		32.8	mg/Kg-dry	1	10/29/2013 12:32	93107
<i>Sample results for Fe and Mg exceed 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume 1, Module 4, section 1.7.4.1).</i>									
<i>MS QC limits for Ca, Fe, Mg, Mn, K, and Na are not applicable due to high sample/spike ratio.</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.35	0.6	S	< 0.6	mg/Kg-dry	1	11/01/2013 11:09	93116
<i>Se - Matrix interference present in sample. Confirmed by bench spike.</i>									
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.012	mg/Kg-dry	1	10/29/2013 12:52	93155
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.149	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
1,2-Dichlorobenzene	NELAP	0.178	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
1,3-Dichlorobenzene	NELAP	0.188	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
1,4-Dichlorobenzene	NELAP	0.178	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
2,4,5-Trichlorophenol	NELAP	0.106	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
2,4,6-Trichlorophenol	NELAP	0.141	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
2,4-Dichlorophenol	NELAP	0.136	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
2,4-Dimethylphenol	NELAP	0.142	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
2,4-Dinitrophenol	NELAP	0.12	1.12		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
2,4-Dinitrotoluene	NELAP	0.117	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
2,6-Dinitrotoluene	NELAP	0.121	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
2-Chloronaphthalene	NELAP	0.134	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
2-Chlorophenol	NELAP	0.142	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
2-Methylnaphthalene	NELAP	0.133	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
2-Nitroaniline	NELAP	0.102	1.12		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
2-Nitrophenol	NELAP	0.125	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
3,3'-Dichlorobenzidine	NELAP	0.224	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
3-Nitroaniline	NELAP	0.092	1.12		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
4,6-Dinitro-2-methylphenol	NELAP	0.121	1.12		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
4-Bromophenyl phenyl ether	NELAP	0.103	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
4-Chloro-3-methylphenol	NELAP	0.123	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
4-Chloroaniline	NELAP	0.136	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
4-Chlorophenyl phenyl ether	NELAP	0.111	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
4-Nitroaniline	NELAP	0.102	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
4-Nitrophenol	NELAP	0.11	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Acenaphthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Acenaphthylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Benzo(a)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Benzo(a)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Benzo(b)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Benzo(g,h,i)perylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Benzo(k)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Bis(2-chloroethoxy)methane	NELAP	0.131	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-004

Client Sample ID: 2396-8-B04

Matrix: SOLID

Collection Date: 10/24/2013 9:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bis(2-chloroethyl)ether	NELAP	0.159	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Bis(2-chloroisopropyl)ether	NELAP	0.128	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Bis(2-ethylhexyl)phthalate	NELAP	0.131	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Butyl benzyl phthalate	NELAP	0.113	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Carbazole		0.137	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Chrysene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Dibenzo(a,h)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Dibenzofuran	NELAP	0.141	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Diethyl phthalate	NELAP	0.108	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Dimethyl phthalate	NELAP	0.102	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Di-n-butyl phthalate	NELAP	0.115	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Di-n-octyl phthalate	NELAP	0.117	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Fluorene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Hexachlorobenzene	NELAP	0.11	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Hexachlorobutadiene	NELAP	0.174	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Hexachlorocyclopentadiene	NELAP	0.114	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Hexachloroethane	NELAP	0.187	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Isophorone	NELAP	0.132	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
m,p-Cresol	NELAP	0.141	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Naphthalene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Nitrobenzene	NELAP	0.14	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
N-Nitroso-di-n-propylamine	NELAP	0.123	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
N-Nitrosodiphenylamine	NELAP	0.103	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
o-Cresol	NELAP	0.132	0.56		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Pentachlorophenol	NELAP	0.739	2.24		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Phenanthrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Phenol	NELAP	0.13	0.392		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 14:08	93178
Surr: 2,4,6-Tribromophenol		0	32.7-130		68.4	%REC	1	11/02/2013 14:08	93178
Surr: 2-Fluorobiphenyl		0	34.1-116		65.4	%REC	1	11/02/2013 14:08	93178
Surr: 2-Fluorophenol		0	30.5-99		65	%REC	1	11/02/2013 14:08	93178
Surr: Nitrobenzene-d5		0	34.1-101		62.6	%REC	1	11/02/2013 14:08	93178
Surr: Phenol-d5		0	34.9-110		70.9	%REC	1	11/02/2013 14:08	93178
Surr: p-Terphenyl-d14		0	41.7-124		74.4	%REC	1	11/02/2013 14:08	93178

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
1,1,1,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
2-Butanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
2-Hexanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	10/28/2013 22:10	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-004

Client Sample ID: 2396-8-B04

Matrix: SOLID

Collection Date: 10/24/2013 9:05

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
4-Methyl-2-pentanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Acetone	NELAP	0.0074	0.037	J	0.015	mg/Kg-dry	1	10/28/2013 22:10	93156
Benzene	NELAP	0.0004	0.001		0.002	mg/Kg-dry	1	10/28/2013 22:10	93156
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Bromomethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Carbon disulfide	NELAP	0.0022	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Chlorobenzene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Chloroethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Chloromethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Ethylbenzene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 22:10	93156
m,p-Xylenes	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	10/28/2013 22:10	93156
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Methylene chloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
o-Xylene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Toluene	NELAP	0.0007	0.004	J	0.003	mg/Kg-dry	1	10/28/2013 22:10	93156
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Vinyl acetate	NELAP	0.0148	0.037		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/28/2013 22:10	93156
Xylenes, Total	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	10/28/2013 22:10	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		89.3	%REC	1	10/28/2013 22:10	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		98.1	%REC	1	10/28/2013 22:10	93156
Surr: Dibromofluoromethane		0	77.7-120		94.6	%REC	1	10/28/2013 22:10	93156
Surr: Toluene-d8		0	86-116		99	%REC	1	10/28/2013 22:10	93156

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-005

Client Sample ID: 2396-8-B05

Matrix: SOLID

Collection Date: 10/24/2013 8:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		17.9	%	1	10/25/2013 15:40	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		82.1	%	1	10/25/2013 15:40	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.14		1	10/25/2013 20:15	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	11/01/2013 12:38	93275
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	11/01/2013 12:38	93275
Manganese	NELAP	0.0016	0.005		0.126	mg/L	1	11/01/2013 12:38	93275
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.04	0.1		0.3	mg/L	2	10/30/2013 12:36	93144
Beryllium	NELAP	0.0003	0.001		0.0011	mg/L	1	10/29/2013 18:04	93144
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 18:04	93144
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 18:04	93144
Chromium	NELAP	0.008	0.02		0.0508	mg/L	2	10/30/2013 12:36	93144
Cobalt	NELAP	0.0022	0.01	J	0.0082	mg/L	1	10/29/2013 18:04	93144
Iron	NELAP	0.014	0.04	X	44.4	mg/L	2	10/30/2013 12:36	93144
Lead	NELAP	0.006	0.007	X	0.0112	mg/L	1	10/29/2013 18:04	93144
Manganese	NELAP	0.0032	0.01	X	0.201	mg/L	2	10/30/2013 12:36	93144
Nickel	NELAP	0.0033	0.01		0.0272	mg/L	1	10/29/2013 18:04	93144
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 18:04	93144
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 18:04	93144
Zinc	NELAP	0.0042	0.02		0.108	mg/L	2	10/30/2013 12:36	93144
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	10/30/2013 15:50	93146
Thallium, SPLP by GFAA	NELAP	0.0005	0.002	J	0.0005	mg/L	1	10/30/2013 18:23	93146
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002	J	0.00009	mg/L	1	10/29/2013 15:47	93154
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	10/30/2013 0:32	93118
Arsenic	NELAP	1.25	2.5		7.35	mg/Kg-dry	1	10/29/2013 13:12	93107
Barium	NELAP	0.25	0.5		155	mg/Kg-dry	1	10/29/2013 13:12	93107
Beryllium	NELAP	0.05	0.1		0.62	mg/Kg-dry	1	10/29/2013 13:12	93107
Boron	NELAP	1	2		6.51	mg/Kg-dry	1	10/29/2013 13:12	93107
Cadmium	NELAP	0.1	0.2	J	0.12	mg/Kg-dry	1	10/29/2013 13:12	93107
Calcium	NELAP	2.5	5		44800	mg/Kg-dry	1	10/29/2013 13:12	93107
Chromium	NELAP	0.5	1	X	20.2	mg/Kg-dry	1	10/29/2013 13:12	93107
Cobalt	NELAP	0.5	1		9.77	mg/Kg-dry	1	10/29/2013 13:12	93107
Copper	NELAP	0.5	1		17.5	mg/Kg-dry	1	10/29/2013 13:12	93107
Iron	NELAP	1	2	BX	19900	mg/Kg-dry	1	10/29/2013 13:12	93107
Lead	NELAP	2	4		13.7	mg/Kg-dry	1	10/29/2013 13:12	93107
Magnesium	NELAP	0.5	1	B	27200	mg/Kg-dry	1	10/29/2013 13:12	93107
Manganese	NELAP	0.25	0.5	X	766	mg/Kg-dry	1	10/29/2013 13:12	93107
Nickel	NELAP	0.5	1		23.9	mg/Kg-dry	1	10/29/2013 13:12	93107
Potassium	NELAP	5	10		1640	mg/Kg-dry	1	10/29/2013 13:12	93107
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	10/29/2013 13:12	93107

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-005

Client Sample ID: 2396-8-B05

Matrix: SOLID

Collection Date: 10/24/2013 8:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Sodium	NELAP	2.5	5		1180	mg/Kg-dry	1	10/29/2013 13:12	93107
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	10/29/2013 13:12	93107
Vanadium	NELAP	0.5	1		34.3	mg/Kg-dry	1	10/29/2013 13:12	93107
Zinc	NELAP	0.5	1		43.8	mg/Kg-dry	1	10/29/2013 13:12	93107
<i>Sample results for Fe and Mg exceed 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume 1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.35	0.6		< 0.6	mg/Kg-dry	1	10/31/2013 11:30	93116
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.024	mg/Kg-dry	1	10/29/2013 12:58	93155
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.162	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
1,2-Dichlorobenzene	NELAP	0.194	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
1,3-Dichlorobenzene	NELAP	0.205	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
1,4-Dichlorobenzene	NELAP	0.194	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
2,4,5-Trichlorophenol	NELAP	0.116	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
2,4,6-Trichlorophenol	NELAP	0.154	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
2,4-Dichlorophenol	NELAP	0.148	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
2,4-Dimethylphenol	NELAP	0.155	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
2,4-Dinitrophenol	NELAP	0.131	1.22		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
2,4-Dinitrotoluene	NELAP	0.127	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
2,6-Dinitrotoluene	NELAP	0.132	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
2-Chloronaphthalene	NELAP	0.146	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
2-Chlorophenol	NELAP	0.155	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
2-Methylnaphthalene	NELAP	0.145	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
2-Nitroaniline	NELAP	0.111	1.22		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
2-Nitrophenol	NELAP	0.137	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
3,3'-Dichlorobenzidine	NELAP	0.244	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
3-Nitroaniline	NELAP	0.1	1.22		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
4,6-Dinitro-2-methylphenol	NELAP	0.132	1.22		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
4-Bromophenyl phenyl ether	NELAP	0.112	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
4-Chloro-3-methylphenol	NELAP	0.134	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
4-Chloroaniline	NELAP	0.148	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
4-Chlorophenyl phenyl ether	NELAP	0.121	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
4-Nitroaniline	NELAP	0.111	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
4-Nitrophenol	NELAP	0.12	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Acenaphthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Acenaphthylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Benzo(a)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Benzo(a)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Benzo(b)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Benzo(g,h,i)perylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Benzo(k)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Bis(2-chloroethoxy)methane	NELAP	0.143	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Bis(2-chloroethyl)ether	NELAP	0.173	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Bis(2-chloroisopropyl)ether	NELAP	0.139	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-005

Client Sample ID: 2396-8-B05

Matrix: SOLID

Collection Date: 10/24/2013 8:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bis(2-ethylhexyl)phthalate	NELAP	0.143	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Butyl benzyl phthalate	NELAP	0.123	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Carbazole		0.149	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Chrysene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Dibenzo(a,h)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Dibenzofuran	NELAP	0.154	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Diethyl phthalate	NELAP	0.117	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Dimethyl phthalate	NELAP	0.111	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Di-n-butyl phthalate	NELAP	0.126	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Di-n-octyl phthalate	NELAP	0.127	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Fluorene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Hexachlorobenzene	NELAP	0.12	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Hexachlorobutadiene	NELAP	0.189	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Hexachlorocyclopentadiene	NELAP	0.124	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Hexachloroethane	NELAP	0.204	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Isophorone	NELAP	0.144	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
m,p-Cresol	NELAP	0.154	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Naphthalene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Nitrobenzene	NELAP	0.152	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
N-Nitroso-di-n-propylamine	NELAP	0.134	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
N-Nitrosodiphenylamine	NELAP	0.112	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
o-Cresol	NELAP	0.144	0.61		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Pentachlorophenol	NELAP	0.805	2.44		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Phenanthrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Phenol	NELAP	0.142	0.427		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	11/02/2013 14:41	93178
Surr: 2,4,6-Tribromophenol		0	32.7-130		61.8	%REC	1	11/02/2013 14:41	93178
Surr: 2-Fluorobiphenyl		0	34.1-116		62.8	%REC	1	11/02/2013 14:41	93178
Surr: 2-Fluorophenol		0	30.5-99		61.4	%REC	1	11/02/2013 14:41	93178
Surr: Nitrobenzene-d5		0	34.1-101		61.2	%REC	1	11/02/2013 14:41	93178
Surr: Phenol-d5		0	34.9-110		69.4	%REC	1	11/02/2013 14:41	93178
Surr: p-Terphenyl-d14		0	41.7-124		71.7	%REC	1	11/02/2013 14:41	93178
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
1,1,1,2-Tetrachloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
1,1,2-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
1,1-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
1,1-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
1,2-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
1,2-Dichloropropane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
1,3-Dichloropropene, Total		0.001	0.004		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
2-Butanone	NELAP	0.01	0.05		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
2-Hexanone	NELAP	0.01	0.05		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
4-Methyl-2-pentanone	NELAP	0.01	0.05		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Acetone	NELAP	0.01	0.05		0.144	mg/Kg-dry	1	10/28/2013 22:37	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-005

Client Sample ID: 2396-8-B05

Matrix: SOLID

Collection Date: 10/24/2013 8:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Benzene	NELAP	0.0005	0.001		0.004	mg/Kg-dry	1	10/28/2013 22:37	93156
Bromodichloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Bromoform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Bromomethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Carbon disulfide	NELAP	0.003	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Carbon tetrachloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Chlorobenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Chloroethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Chloroform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Chloromethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
cis-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
cis-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Dibromochloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Ethylbenzene	NELAP	0.001	0.005	J	0.003	mg/Kg-dry	1	10/28/2013 22:37	93156
m,p-Xylenes	NELAP	0.001	0.005	J	0.004	mg/Kg-dry	1	10/28/2013 22:37	93156
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Methylene chloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
o-Xylene	NELAP	0.001	0.005	J	0.001	mg/Kg-dry	1	10/28/2013 22:37	93156
Styrene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Tetrachloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Toluene	NELAP	0.001	0.005		0.006	mg/Kg-dry	1	10/28/2013 22:37	93156
trans-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
trans-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Trichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Vinyl acetate	NELAP	0.0201	0.05		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 22:37	93156
Xylenes, Total	NELAP	0.001	0.005		0.005	mg/Kg-dry	1	10/28/2013 22:37	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		85.4	%REC	1	10/28/2013 22:37	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		98.3	%REC	1	10/28/2013 22:37	93156
Surr: Dibromofluoromethane		0	77.7-120		95	%REC	1	10/28/2013 22:37	93156
Surr: Toluene-d8		0	86-116		101.2	%REC	1	10/28/2013 22:37	93156

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-007

Client Sample ID: 2396-8-B07

Matrix: SOLID

Collection Date: 10/24/2013 8:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		21.5	%	1	10/25/2013 15:41	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		78.5	%	1	10/25/2013 15:41	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.98		1	10/25/2013 20:19	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	11/01/2013 12:51	93275
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	11/01/2013 12:51	93275
Manganese	NELAP	0.0016	0.005		0.14	mg/L	1	11/01/2013 12:51	93275
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.04	0.1		0.441	mg/L	2	10/30/2013 12:39	93144
Beryllium	NELAP	0.0003	0.001		0.0016	mg/L	1	10/29/2013 18:18	93144
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 18:18	93144
Cadmium	NELAP	0.0003	0.002	J	0.0005	mg/L	1	10/29/2013 18:18	93144
Chromium	NELAP	0.008	0.02		0.067	mg/L	2	10/30/2013 12:39	93144
Cobalt	NELAP	0.0022	0.01		0.0116	mg/L	1	10/29/2013 18:18	93144
Iron	NELAP	0.014	0.04	X	63.9	mg/L	2	10/30/2013 12:39	93144
Lead	NELAP	0.006	0.007	X	0.0132	mg/L	1	10/29/2013 18:18	93144
Manganese	NELAP	0.0032	0.01	X	0.262	mg/L	2	10/30/2013 12:39	93144
Nickel	NELAP	0.0066	0.02		0.0416	mg/L	2	10/30/2013 12:39	93144
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 18:18	93144
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 18:18	93144
Zinc	NELAP	0.0042	0.02		0.168	mg/L	2	10/30/2013 12:39	93144
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	10/30/2013 15:58	93146
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 18:30	93146
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002	J	0.00011	mg/L	1	10/29/2013 15:52	93154
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.41	4.63		< 4.63	mg/Kg-dry	1	10/30/2013 0:44	93118
Arsenic	NELAP	1.2	2.4	X	11.8	mg/Kg-dry	1	10/29/2013 13:24	93107
Barium	NELAP	0.24	0.48		191	mg/Kg-dry	1	10/29/2013 13:24	93107
Beryllium	NELAP	0.05	0.1		0.94	mg/Kg-dry	1	10/29/2013 13:24	93107
Boron	NELAP	0.96	1.92		7.65	mg/Kg-dry	1	10/29/2013 13:24	93107
Cadmium	NELAP	0.1	0.19		0.21	mg/Kg-dry	1	10/29/2013 13:24	93107
Calcium	NELAP	2.4	4.81		8560	mg/Kg-dry	1	10/29/2013 13:24	93107
Chromium	NELAP	0.48	0.96	X	29.8	mg/Kg-dry	1	10/29/2013 13:24	93107
Cobalt	NELAP	0.48	0.96		12.8	mg/Kg-dry	1	10/29/2013 13:24	93107
Copper	NELAP	0.48	0.96		26.8	mg/Kg-dry	1	10/29/2013 13:24	93107
Iron	NELAP	0.96	1.92	BX	30900	mg/Kg-dry	1	10/29/2013 13:24	93107
Lead	NELAP	1.92	3.85		16.1	mg/Kg-dry	1	10/29/2013 13:24	93107
Magnesium	NELAP	0.48	0.96	B	8420	mg/Kg-dry	1	10/29/2013 13:24	93107
Manganese	NELAP	0.24	0.48	X	1030	mg/Kg-dry	1	10/29/2013 13:24	93107
Nickel	NELAP	0.48	0.96		35.1	mg/Kg-dry	1	10/29/2013 13:24	93107
Potassium	NELAP	4.81	9.62		2830	mg/Kg-dry	1	10/29/2013 13:24	93107
Silver	NELAP	0.48	0.53		< 0.53	mg/Kg-dry	1	10/29/2013 13:24	93107

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-007

Client Sample ID: 2396-8-B07

Matrix: SOLID

Collection Date: 10/24/2013 8:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Sodium	NELAP	2.4	4.81		1600	mg/Kg-dry	1	10/29/2013 13:24	93107
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	10/29/2013 13:24	93107
Vanadium	NELAP	0.48	0.96		46.1	mg/Kg-dry	1	10/29/2013 13:24	93107
Zinc	NELAP	0.48	0.96		72.2	mg/Kg-dry	1	10/29/2013 13:24	93107
<i>Sample results for Fe and Mg exceed 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume 1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.35	0.6		< 0.6	mg/Kg-dry	1	10/31/2013 11:37	93116
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.038	mg/Kg-dry	1	10/29/2013 13:03	93155
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.169	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
1,2-Dichlorobenzene	NELAP	0.202	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
1,3-Dichlorobenzene	NELAP	0.213	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
1,4-Dichlorobenzene	NELAP	0.202	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
2,4,5-Trichlorophenol	NELAP	0.12	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
2,4,6-Trichlorophenol	NELAP	0.16	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
2,4-Dichlorophenol	NELAP	0.153	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
2,4-Dimethylphenol	NELAP	0.161	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
2,4-Dinitrophenol	NELAP	0.136	1.27		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
2,4-Dinitrotoluene	NELAP	0.132	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
2,6-Dinitrotoluene	NELAP	0.137	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
2-Chloronaphthalene	NELAP	0.152	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
2-Chlorophenol	NELAP	0.161	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
2-Methylnaphthalene	NELAP	0.151	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
2-Nitroaniline	NELAP	0.115	1.27		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
2-Nitrophenol	NELAP	0.142	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
3,3'-Dichlorobenzidine	NELAP	0.254	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
3-Nitroaniline	NELAP	0.104	1.27		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
4,6-Dinitro-2-methylphenol	NELAP	0.137	1.27		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
4-Bromophenyl phenyl ether	NELAP	0.117	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
4-Chloro-3-methylphenol	NELAP	0.139	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
4-Chloroaniline	NELAP	0.153	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
4-Chlorophenyl phenyl ether	NELAP	0.126	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
4-Nitroaniline	NELAP	0.115	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
4-Nitrophenol	NELAP	0.124	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Acenaphthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Acenaphthylene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Anthracene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Benzo(a)anthracene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Benzo(a)pyrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Benzo(b)fluoranthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Benzo(g,h,i)perylene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Benzo(k)fluoranthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Bis(2-chloroethoxy)methane	NELAP	0.148	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Bis(2-chloroethyl)ether	NELAP	0.18	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Bis(2-chloroisopropyl)ether	NELAP	0.145	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-007

Client Sample ID: 2396-8-B07

Matrix: SOLID

Collection Date: 10/24/2013 8:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bis(2-ethylhexyl)phthalate	NELAP	0.148	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Butyl benzyl phthalate	NELAP	0.128	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Carbazole		0.155	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Chrysene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Dibenzo(a,h)anthracene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Dibenzofuran	NELAP	0.16	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Diethyl phthalate	NELAP	0.122	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Dimethyl phthalate	NELAP	0.115	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Di-n-butyl phthalate	NELAP	0.131	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Di-n-octyl phthalate	NELAP	0.132	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Fluoranthene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Fluorene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Hexachlorobenzene	NELAP	0.124	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Hexachlorobutadiene	NELAP	0.197	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Hexachlorocyclopentadiene	NELAP	0.129	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Hexachloroethane	NELAP	0.212	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Indeno(1,2,3-cd)pyrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Isophorone	NELAP	0.15	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
m,p-Cresol	NELAP	0.16	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Naphthalene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Nitrobenzene	NELAP	0.158	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
N-Nitroso-di-n-propylamine	NELAP	0.139	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
N-Nitrosodiphenylamine	NELAP	0.117	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
o-Cresol	NELAP	0.15	0.634		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Pentachlorophenol	NELAP	0.837	2.54		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Phenanthrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Phenol	NELAP	0.147	0.444		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Pyrene	NELAP	0.021	0.043		ND	mg/Kg-dry	1	11/02/2013 15:48	93178
Surr: 2,4,6-Tribromophenol		0	32.7-130		57.8	%REC	1	11/02/2013 15:48	93178
Surr: 2-Fluorobiphenyl		0	34.1-116		53.4	%REC	1	11/02/2013 15:48	93178
Surr: 2-Fluorophenol		0	30.5-99		55.2	%REC	1	11/02/2013 15:48	93178
Surr: Nitrobenzene-d5		0	34.1-101		52.2	%REC	1	11/02/2013 15:48	93178
Surr: Phenol-d5		0	34.9-110		63.1	%REC	1	11/02/2013 15:48	93178
Surr: p-Terphenyl-d14		0	41.7-124		68.7	%REC	1	11/02/2013 15:48	93178
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
1,1,1,2-Tetrachloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
1,1,1,2-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
1,1-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
1,1-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
1,2-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
1,2-Dichloropropane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
1,3-Dichloropropene, Total		0.001	0.004		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
2-Butanone	NELAP	0.0095	0.048		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
2-Hexanone	NELAP	0.0095	0.048		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
4-Methyl-2-pentanone	NELAP	0.0095	0.048		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Acetone	NELAP	0.0095	0.048	J	0.015	mg/Kg-dry	1	10/29/2013 15:32	93210



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-007

Client Sample ID: 2396-8-B07

Matrix: SOLID

Collection Date: 10/24/2013 8:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Benzene	NELAP	0.0005	0.001		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Bromodichloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Bromoform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Bromomethane	NELAP	0.0019	0.01		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Carbon disulfide	NELAP	0.0029	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Carbon tetrachloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Chlorobenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Chloroethane	NELAP	0.0019	0.01		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Chloroform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Chloromethane	NELAP	0.0019	0.01		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
cis-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
cis-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Dibromochloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Ethylbenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
m,p-Xylenes	NELAP	0.001	0.005	J	0.001	mg/Kg-dry	1	10/29/2013 15:32	93210
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Methylene chloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
o-Xylene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Styrene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Tetrachloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Toluene	NELAP	0.001	0.005	J	0.001	mg/Kg-dry	1	10/29/2013 15:32	93210
trans-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
trans-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Trichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Vinyl acetate	NELAP	0.019	0.048		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/29/2013 15:32	93210
Xylenes, Total	NELAP	0.001	0.005	J	0.001	mg/Kg-dry	1	10/29/2013 15:32	93210
Surr: 1,2-Dichloroethane-d4		0	72.2-131		112	%REC	1	10/29/2013 15:32	93210
Surr: 4-Bromofluorobenzene		0	82.1-116		107.6	%REC	1	10/29/2013 15:32	93210
Surr: Dibromofluoromethane		0	77.7-120		104.2	%REC	1	10/29/2013 15:32	93210
Surr: Toluene-d8		0	86-116		97.3	%REC	1	10/29/2013 15:32	93210



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-008

Client Sample ID: 2396-8-B07 DUP

Matrix: SOLID

Collection Date: 10/24/2013 8:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		18.2	%	1	10/25/2013 15:41	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		81.8	%	1	10/25/2013 15:41	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.03		1	10/25/2013 20:23	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02	J	0.0119	mg/L	1	11/01/2013 12:57	93275
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	11/01/2013 12:57	93275
Manganese	NELAP	0.0016	0.005		0.244	mg/L	1	11/01/2013 12:57	93275
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.04	0.1		0.43	mg/L	2	10/30/2013 12:43	93144
Beryllium	NELAP	0.0003	0.001		0.0015	mg/L	1	10/29/2013 18:22	93144
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 18:22	93144
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 18:22	93144
Chromium	NELAP	0.008	0.02		0.0664	mg/L	2	10/30/2013 12:43	93144
Cobalt	NELAP	0.0022	0.01	J	0.0097	mg/L	1	10/29/2013 18:22	93144
Iron	NELAP	0.014	0.04	X	61.5	mg/L	2	10/30/2013 12:43	93144
Lead	NELAP	0.006	0.007	X	0.0112	mg/L	1	10/29/2013 18:22	93144
Manganese	NELAP	0.0032	0.01	X	0.249	mg/L	2	10/30/2013 12:43	93144
Nickel	NELAP	0.0066	0.02		0.042	mg/L	2	10/30/2013 12:43	93144
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 18:22	93144
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 18:22	93144
Zinc	NELAP	0.0042	0.02		0.153	mg/L	2	10/30/2013 12:43	93144
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	10/30/2013 16:01	93146
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 18:34	93146
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002	J	0.00012	mg/L	1	10/29/2013 15:54	93154
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.45	4.72		< 4.72	mg/Kg-dry	1	10/30/2013 0:50	93118
Arsenic	NELAP	1.25	2.5		9.92	mg/Kg-dry	1	10/29/2013 13:30	93107
Barium	NELAP	0.25	0.5		176	mg/Kg-dry	1	10/29/2013 13:30	93107
Beryllium	NELAP	0.05	0.1		0.94	mg/Kg-dry	1	10/29/2013 13:30	93107
Boron	NELAP	1	2		5.92	mg/Kg-dry	1	10/29/2013 13:30	93107
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	10/29/2013 13:30	93107
Calcium	NELAP	2.5	5		4380	mg/Kg-dry	1	10/29/2013 13:30	93107
Chromium	NELAP	0.5	1	X	31.2	mg/Kg-dry	1	10/29/2013 13:30	93107
Cobalt	NELAP	0.5	1		8.88	mg/Kg-dry	1	10/29/2013 13:30	93107
Copper	NELAP	0.5	1		23.7	mg/Kg-dry	1	10/29/2013 13:30	93107
Iron	NELAP	1	2	BX	29300	mg/Kg-dry	1	10/29/2013 13:30	93107
Lead	NELAP	2	4		12.9	mg/Kg-dry	1	10/29/2013 13:30	93107
Magnesium	NELAP	0.5	1	B	5860	mg/Kg-dry	1	10/29/2013 13:30	93107
Manganese	NELAP	0.25	0.5		468	mg/Kg-dry	1	10/29/2013 13:30	93107
Nickel	NELAP	0.5	1		27.2	mg/Kg-dry	1	10/29/2013 13:30	93107
Potassium	NELAP	5	10		2460	mg/Kg-dry	1	10/29/2013 13:30	93107
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	10/29/2013 13:30	93107



Laboratory Results

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Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-008

Client Sample ID: 2396-8-B07 DUP

Matrix: SOLID

Collection Date: 10/24/2013 8:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Sodium	NELAP	2.5	5		1610	mg/Kg-dry	1	10/29/2013 13:30	93107
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	10/29/2013 13:30	93107
Vanadium	NELAP	0.5	1		45.5	mg/Kg-dry	1	10/29/2013 13:30	93107
Zinc	NELAP	0.5	1		65.8	mg/Kg-dry	1	10/29/2013 13:30	93107
<i>Sample results for Fe and Mg exceed 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume 1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.337	0.577		< 0.577	mg/Kg-dry	1	10/31/2013 11:40	93116
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.03	mg/Kg-dry	1	10/29/2013 13:05	93155
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.163	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
1,2-Dichlorobenzene	NELAP	0.194	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
1,3-Dichlorobenzene	NELAP	0.205	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
1,4-Dichlorobenzene	NELAP	0.194	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
2,4,5-Trichlorophenol	NELAP	0.116	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
2,4,6-Trichlorophenol	NELAP	0.154	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
2,4-Dichlorophenol	NELAP	0.148	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
2,4-Dimethylphenol	NELAP	0.155	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
2,4-Dinitrophenol	NELAP	0.131	1.22		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
2,4-Dinitrotoluene	NELAP	0.127	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
2,6-Dinitrotoluene	NELAP	0.132	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
2-Chloronaphthalene	NELAP	0.147	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
2-Chlorophenol	NELAP	0.155	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
2-Methylnaphthalene	NELAP	0.145	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
2-Nitroaniline	NELAP	0.111	1.22		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
2-Nitrophenol	NELAP	0.137	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
3,3'-Dichlorobenzidine	NELAP	0.244	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
3-Nitroaniline	NELAP	0.1	1.22		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
4,6-Dinitro-2-methylphenol	NELAP	0.132	1.22		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
4-Bromophenyl phenyl ether	NELAP	0.112	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
4-Chloro-3-methylphenol	NELAP	0.134	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
4-Chloroaniline	NELAP	0.148	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
4-Chlorophenyl phenyl ether	NELAP	0.121	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
4-Nitroaniline	NELAP	0.111	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
4-Nitrophenol	NELAP	0.12	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Acenaphthene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Acenaphthylene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Anthracene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Benzo(a)anthracene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Benzo(a)pyrene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Benzo(b)fluoranthene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Benzo(g,h,i)perylene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Benzo(k)fluoranthene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Bis(2-chloroethoxy)methane	NELAP	0.143	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Bis(2-chloroethyl)ether	NELAP	0.174	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Bis(2-chloroisopropyl)ether	NELAP	0.139	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178



Laboratory Results

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Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

Report Date: 05-Nov-13

Lab ID: 13101300-008

Client Sample ID: 2396-8-B07 DUP

Matrix: SOLID

Collection Date: 10/24/2013 8:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bis(2-ethylhexyl)phthalate	NELAP	0.143	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Butyl benzyl phthalate	NELAP	0.123	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Carbazole		0.149	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Chrysene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Dibenzo(a,h)anthracene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Dibenzofuran	NELAP	0.154	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Diethyl phthalate	NELAP	0.117	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Dimethyl phthalate	NELAP	0.111	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Di-n-butyl phthalate	NELAP	0.126	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Di-n-octyl phthalate	NELAP	0.127	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Fluoranthene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Fluorene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Hexachlorobenzene	NELAP	0.12	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Hexachlorobutadiene	NELAP	0.189	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Hexachlorocyclopentadiene	NELAP	0.125	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Hexachloroethane	NELAP	0.204	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Isophorone	NELAP	0.144	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
m,p-Cresol	NELAP	0.154	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Naphthalene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Nitrobenzene	NELAP	0.153	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
N-Nitroso-di-n-propylamine	NELAP	0.134	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
N-Nitrosodiphenylamine	NELAP	0.112	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
o-Cresol	NELAP	0.144	0.611		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Pentachlorophenol	NELAP	0.807	2.44		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Phenanthrene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Phenol	NELAP	0.142	0.428		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Pyrene	NELAP	0.02	0.042		ND	mg/Kg-dry	1	11/02/2013 16:21	93178
Surr: 2,4,6-Tribromophenol		0	32.7-130		64.3	%REC	1	11/02/2013 16:21	93178
Surr: 2-Fluorobiphenyl		0	34.1-116		63.3	%REC	1	11/02/2013 16:21	93178
Surr: 2-Fluorophenol		0	30.5-99		61.5	%REC	1	11/02/2013 16:21	93178
Surr: Nitrobenzene-d5		0	34.1-101		59.9	%REC	1	11/02/2013 16:21	93178
Surr: Phenol-d5		0	34.9-110		69.8	%REC	1	11/02/2013 16:21	93178
Surr: p-Terphenyl-d14		0	41.7-124		73.2	%REC	1	11/02/2013 16:21	93178
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
1,1,1,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
2-Butanone	NELAP	0.0083	0.042		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
2-Hexanone	NELAP	0.0083	0.042		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
4-Methyl-2-pentanone	NELAP	0.0083	0.042		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Acetone	NELAP	0.0083	0.042	J	0.014	mg/Kg-dry	1	10/29/2013 15:59	93210



Laboratory Results

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Client: Andrews Engineering, Inc.

Work Order: 13101300

Client Project: IDOT2013-033

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Client Sample ID: 2396-8-B07 DUP

Matrix: SOLID

Collection Date: 10/24/2013 8:20

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Bromomethane	NELAP	0.0017	0.008		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Carbon disulfide	NELAP	0.0025	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Chloroethane	NELAP	0.0017	0.008		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Chloromethane	NELAP	0.0017	0.008		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Ethylbenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
m,p-Xylenes	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/29/2013 15:59	93210
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Toluene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/29/2013 15:59	93210
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Vinyl acetate	NELAP	0.0166	0.042		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/29/2013 15:59	93210
Xylenes, Total	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/29/2013 15:59	93210
Surr: 1,2-Dichloroethane-d4		0	72.2-131		113.3	%REC	1	10/29/2013 15:59	93210
Surr: 4-Bromofluorobenzene		0	82.1-116		107	%REC	1	10/29/2013 15:59	93210
Surr: Dibromofluoromethane		0	77.7-120		103.9	%REC	1	10/29/2013 15:59	93210
Surr: Toluene-d8		0	86-116		97.5	%REC	1	10/29/2013 15:59	93210



CHAIN OF CUSTODY RECORD

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

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: US RE 20 Kane Co.
Project No.: IDOT 2013-033
TAT: 15 BD 10 BD 5 BD 2 BD Other
Sampler: _____

COC No.: 1091
2 of 3
Lab Job No.: 10/25/13
Sample Temp.: 13/0/300
24, Re

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

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.

Lab ID	Sample ID	Sample Date	Sample Time	Matrix	ANALYSES										Comments		
					VOCs	SVOCs	BTEX & MTBE	PNAs	Pesticides	PCBs	* Total Metals	SPLP/** TCLP Metals	pH	% Solids		Waste Characterization	
13/01300 001	2396-8-B01	10/24/13	0950	S	X	X						X	X	X			
002	2396-8-B02		0935														
003	2396-8-B03		0920														
004	2396-8-B04		0905														
005	2396-8-B05		0855														
006	2396-8-B06		0840														
007	2396-8-B07		0820														
008	2396-8-B07 DUP	10/24/13	0820	S	X	X						X	X	X			
					CWB												
Relinquished by: <u>Shelly Hennessy</u>					Date/Time	Received by: <u>Shelly Hennessy</u>										Date/Time	
					10/24/13 10:28											10/24/13 10:25	
Relinquished by: <u>Shelly Hennessy</u>					Date/Time	Received by: <u>Shelly Hennessy</u>										Date/Time	
					10/24/13 12:00											10/25/13 9:10	
Relinquished by: _____					Date/Time	Received by: <u>FED-EX</u>										Date/Time	

March 07, 2014

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



RE: IDOT2013-033

WorkOrder: 14021328

Dear Colleen Grey:

TEKLAB, INC received 4 samples on 2/28/2014 8:46:00 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
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	4
Laboratory Results	5
Quality Control Results	21
Receiving Check List	58
Chain of Custody	Appended

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-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 |

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Cooler Receipt Temp: 1.4 °C

Locations and Accreditations

	Collinsville	Springfield	Kansas City	Collinsville Air
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	3920 Pintail Dr Springfield, IL 62711-9415	8421 Nieman Road Lenexa, KS 66214	5445 Horseshoe Lake Road 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	4/30/2014	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2014	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2014	Springfield
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2014	Collinsville
Arkansas	ADEQ	88-0966		3/14/2014	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: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021328-001

Client Sample ID: 2396-8-B01-2

Matrix: SOLID

Collection Date: 02/27/2014 11:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		11.8	%	1	03/03/2014 13:03	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		88.2	%	1	03/03/2014 13:03	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.6		1	03/03/2014 19:20	R187768
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		0.0816	mg/L	1	03/06/2014 15:53	96628
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0567	mg/L	1	03/04/2014 18:57	96534
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 18:57	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 18:57	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 18:57	96534
Chromium	NELAP	0.004	0.01	J	0.0064	mg/L	1	03/04/2014 18:57	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 18:57	96534
Iron	NELAP	0.007	0.1	X	5.08	mg/L	1	03/04/2014 18:57	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 18:57	96534
Manganese	NELAP	0.0016	0.005		0.0445	mg/L	1	03/04/2014 18:57	96534
Nickel	NELAP	0.0033	0.01	J	0.0055	mg/L	1	03/04/2014 18:57	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 18:57	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 18:57	96534
Zinc	NELAP	0.0021	0.01		0.0174	mg/L	1	03/04/2014 18:57	96534
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	03/04/2014 10:17	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 18:57	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 14:14	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.45	4.72		< 4.72	mg/Kg-dry	1	03/04/2014 19:33	96509
Arsenic	NELAP	1.18	2.36		3.76	mg/Kg-dry	1	03/04/2014 14:06	96484
Barium	NELAP	0.24	0.47		33.2	mg/Kg-dry	1	03/03/2014 21:38	96484
Beryllium	NELAP	0.05	0.09		0.41	mg/Kg-dry	1	03/03/2014 21:38	96484
Boron	NELAP	0.94	1.89		9.11	mg/Kg-dry	1	03/03/2014 21:38	96484
Cadmium	NELAP	0.09	0.19		< 0.19	mg/Kg-dry	1	03/04/2014 14:06	96484
Calcium	NELAP	2.36	4.72		77400	mg/Kg-dry	1	03/03/2014 21:38	96484
Chromium	NELAP	0.47	0.94		11.4	mg/Kg-dry	1	03/03/2014 21:38	96484
Cobalt	NELAP	0.47	0.94		5.17	mg/Kg-dry	1	03/03/2014 21:38	96484
Copper	NELAP	0.47	0.94		13.3	mg/Kg-dry	1	03/03/2014 21:38	96484
Iron	NELAP	0.94	1.89		12000	mg/Kg-dry	1	03/03/2014 21:38	96484
Lead	NELAP	1.89	3.77		4.9	mg/Kg-dry	1	03/03/2014 21:38	96484
Magnesium	NELAP	0.47	0.94		33900	mg/Kg-dry	1	03/03/2014 21:38	96484
Manganese	NELAP	0.24	0.47		310	mg/Kg-dry	1	03/03/2014 21:38	96484
Nickel	NELAP	0.47	0.94		12.1	mg/Kg-dry	1	03/03/2014 21:38	96484
Potassium	NELAP	4.72	9.43		1620	mg/Kg-dry	1	03/03/2014 21:38	96484
Silver	NELAP	0.47	0.52		< 0.52	mg/Kg-dry	1	03/03/2014 21:38	96484
Sodium	NELAP	2.36	4.72		369	mg/Kg-dry	1	03/03/2014 21:38	96484
Thallium	NELAP	2.36	2.45		< 2.45	mg/Kg-dry	1	03/03/2014 21:38	96484

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021328-001

Client Sample ID: 2396-8-B01-2

Matrix: SOLID

Collection Date: 02/27/2014 11:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.47	0.94		14.9	mg/Kg-dry	1	03/03/2014 21:38	96484
Zinc	NELAP	0.47	0.94	B	30.4	mg/Kg-dry	1	03/04/2014 14:06	96484
<i>Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.337	0.577		< 0.577	mg/Kg-dry	1	03/03/2014 10:57	96485
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.011	mg/Kg-dry	1	03/03/2014 14:45	96522
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.15	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
1,2-Dichlorobenzene	NELAP	0.179	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
1,3-Dichlorobenzene	NELAP	0.19	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
1,4-Dichlorobenzene	NELAP	0.179	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
2,4,5-Trichlorophenol	NELAP	0.107	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
2,4,6-Trichlorophenol	NELAP	0.142	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
2,4-Dichlorophenol	NELAP	0.137	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
2,4-Dimethylphenol	NELAP	0.143	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
2,4-Dinitrophenol	NELAP	0.121	1.13		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
2,4-Dinitrotoluene	NELAP	0.117	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
2,6-Dinitrotoluene	NELAP	0.122	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
2-Chloronaphthalene	NELAP	0.135	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
2-Chlorophenol	NELAP	0.143	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
2-Methylnaphthalene	NELAP	0.134	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
2-Nitroaniline	NELAP	0.103	1.13		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
2-Nitrophenol	NELAP	0.126	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
3,3'-Dichlorobenzidine	NELAP	0.226	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
3-Nitroaniline	NELAP	0.092	1.13		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
4,6-Dinitro-2-methylphenol	NELAP	0.122	1.13		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
4-Bromophenyl phenyl ether	NELAP	0.104	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
4-Chloro-3-methylphenol	NELAP	0.124	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
4-Chloroaniline	NELAP	0.137	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
4-Chlorophenyl phenyl ether	NELAP	0.112	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
4-Nitroaniline	NELAP	0.103	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
4-Nitrophenol	NELAP	0.111	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Acenaphthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Acenaphthylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Benzo(a)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Benzo(a)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Benzo(b)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Benzo(g,h,i)perylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Benzo(k)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Bis(2-chloroethoxy)methane	NELAP	0.132	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Bis(2-chloroethyl)ether	NELAP	0.16	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Bis(2-chloroisopropyl)ether	NELAP	0.129	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Bis(2-ethylhexyl)phthalate	NELAP	0.132	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Butyl benzyl phthalate	NELAP	0.114	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Carbazole		0.138	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021328-001

Client Sample ID: 2396-8-B01-2

Matrix: SOLID

Collection Date: 02/27/2014 11:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Dibenzo(a,h)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Dibenzofuran	NELAP	0.142	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Diethyl phthalate	NELAP	0.108	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Dimethyl phthalate	NELAP	0.103	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Di-n-butyl phthalate	NELAP	0.116	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Di-n-octyl phthalate	NELAP	0.117	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Fluorene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Hexachlorobenzene	NELAP	0.111	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Hexachlorobutadiene	NELAP	0.175	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Hexachlorocyclopentadiene	NELAP	0.115	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Hexachloroethane	NELAP	0.188	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Isophorone	NELAP	0.133	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
m,p-Cresol	NELAP	0.142	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Naphthalene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Nitrobenzene	NELAP	0.141	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
N-Nitroso-di-n-propylamine	NELAP	0.124	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
N-Nitrosodiphenylamine	NELAP	0.104	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
o-Cresol	NELAP	0.133	0.564		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Pentachlorophenol	NELAP	0.745	2.26		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Phenanthrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Phenol	NELAP	0.131	0.395		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:05	96468
Surr: 2,4,6-Tribromophenol		0	46-125		72.7	%REC	1	02/28/2014 19:05	96468
Surr: 2-Fluorobiphenyl		0	49.6-91.4		56.8	%REC	1	02/28/2014 19:05	96468
Surr: 2-Fluorophenol		0	51.4-93.1		51.6	%REC	1	02/28/2014 19:05	96468
Surr: Nitrobenzene-d5		0	32.8-110		46.8	%REC	1	02/28/2014 19:05	96468
Surr: Phenol-d5		0	57.2-100		70.2	%REC	1	02/28/2014 19:05	96468
Surr: p-Terphenyl-d14		0	61.8-117		77.8	%REC	1	02/28/2014 19:05	96468
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
1,1,1,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
1,3-Dichloropropane, Total		0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
2-Butanone	NELAP	0.007	0.035	J	0.015	mg/Kg-dry	1	02/28/2014 18:28	96521
2-Hexanone	NELAP	0.007	0.035		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
4-Methyl-2-pentanone	NELAP	0.007	0.035		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Acetone	NELAP	0.007	0.035		0.04	mg/Kg-dry	1	02/28/2014 18:28	96521
Benzene	NELAP	0.0004	0.001		0.005	mg/Kg-dry	1	02/28/2014 18:28	96521
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021328-001

Client Sample ID: 2396-8-B01-2

Matrix: SOLID

Collection Date: 02/27/2014 11:30

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Carbon disulfide	NELAP	0.0021	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Chlorobenzene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Chloroethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Chloromethane	NELAP	0.0014	0.007		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Ethylbenzene	NELAP	0.0007	0.004	J	0.003	mg/Kg-dry	1	02/28/2014 18:28	96521
m,p-Xylenes	NELAP	0.0007	0.004		0.004	mg/Kg-dry	1	02/28/2014 18:28	96521
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Methylene chloride	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	02/28/2014 18:28	96521
o-Xylene	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	02/28/2014 18:28	96521
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Toluene	NELAP	0.0007	0.004		0.009	mg/Kg-dry	1	02/28/2014 18:28	96521
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Vinyl acetate	NELAP	0.014	0.035		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	02/28/2014 18:28	96521
Xylenes, Total	NELAP	0.0007	0.004		0.005	mg/Kg-dry	1	02/28/2014 18:28	96521
Surr: 1,2-Dichloroethane-d4		0	72.2-131		86.4	%REC	1	02/28/2014 18:28	96521
Surr: 4-Bromofluorobenzene		0	82.1-116		96.2	%REC	1	02/28/2014 18:28	96521
Surr: Dibromofluoromethane		0	77.7-120		89.7	%REC	1	02/28/2014 18:28	96521
Surr: Toluene-d8		0	86-116		104.3	%REC	1	02/28/2014 18:28	96521

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021328-002

Client Sample ID: 2396-8-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 11:15

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	02/28/2014 18:09	R187735
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		89	%	1	02/28/2014 18:09	R187735
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.39		1	03/03/2014 19:22	R187768
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.033	mg/L	1	03/04/2014 19:00	96534
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 19:00	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 19:00	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 19:00	96534
Chromium	NELAP	0.004	0.01		< 0.01	mg/L	1	03/04/2014 19:00	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 19:00	96534
Iron	NELAP	0.007	0.1		1.71	mg/L	1	03/04/2014 19:00	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 19:00	96534
Manganese	NELAP	0.0016	0.005		0.013	mg/L	1	03/04/2014 19:00	96534
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	03/04/2014 19:00	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 19:00	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 19:00	96534
Zinc	NELAP	0.0021	0.01	J	0.0086	mg/L	1	03/04/2014 19:00	96534
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	03/04/2014 10:40	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 19:00	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 14:17	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.36	4.55		< 4.55	mg/Kg-dry	1	03/04/2014 19:37	96509
Arsenic	NELAP	1.23	2.45		3.05	mg/Kg-dry	1	03/04/2014 14:09	96484
Barium	NELAP	0.25	0.49		46.3	mg/Kg-dry	1	03/03/2014 21:49	96484
Beryllium	NELAP	0.05	0.1		0.49	mg/Kg-dry	1	03/03/2014 21:49	96484
Boron	NELAP	0.98	1.96		11.1	mg/Kg-dry	1	03/03/2014 21:49	96484
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	03/04/2014 14:09	96484
Calcium	NELAP	2.45	4.9		90200	mg/Kg-dry	1	03/03/2014 21:49	96484
Chromium	NELAP	0.49	0.98		12.9	mg/Kg-dry	1	03/03/2014 21:49	96484
Cobalt	NELAP	0.49	0.98		4.58	mg/Kg-dry	1	03/03/2014 21:49	96484
Copper	NELAP	0.49	0.98		11.5	mg/Kg-dry	1	03/03/2014 21:49	96484
Iron	NELAP	0.98	1.96		12000	mg/Kg-dry	1	03/03/2014 21:49	96484
Lead	NELAP	1.96	3.92		4.02	mg/Kg-dry	1	03/03/2014 21:49	96484
Magnesium	NELAP	0.49	0.98		39500	mg/Kg-dry	1	03/03/2014 21:49	96484
Manganese	NELAP	0.25	0.49		225	mg/Kg-dry	1	03/03/2014 21:49	96484
Nickel	NELAP	0.49	0.98		12	mg/Kg-dry	1	03/03/2014 21:49	96484
Potassium	NELAP	4.9	9.8		1830	mg/Kg-dry	1	03/03/2014 21:49	96484
Silver	NELAP	0.49	0.54		< 0.54	mg/Kg-dry	1	03/03/2014 21:49	96484
Sodium	NELAP	2.45	4.9		149	mg/Kg-dry	1	03/03/2014 21:49	96484
Thallium	NELAP	2.45	2.55		< 2.55	mg/Kg-dry	1	03/03/2014 21:49	96484
Vanadium	NELAP	0.49	0.98		17.3	mg/Kg-dry	1	03/03/2014 21:49	96484
Zinc	NELAP	0.49	0.98	B	25.4	mg/Kg-dry	1	03/04/2014 14:09	96484

Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021328-002

Client Sample ID: 2396-8-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 11:15

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	03/03/2014 11:01	96485
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.012	mg/Kg-dry	1	03/03/2014 14:47	96522
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.15	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
1,2-Dichlorobenzene	NELAP	0.179	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
1,3-Dichlorobenzene	NELAP	0.189	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
1,4-Dichlorobenzene	NELAP	0.179	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
2,4,5-Trichlorophenol	NELAP	0.107	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
2,4,6-Trichlorophenol	NELAP	0.142	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
2,4-Dichlorophenol	NELAP	0.136	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
2,4-Dimethylphenol	NELAP	0.143	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
2,4-Dinitrophenol	NELAP	0.121	1.13		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
2,4-Dinitrotoluene	NELAP	0.117	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
2,6-Dinitrotoluene	NELAP	0.122	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
2-Chloronaphthalene	NELAP	0.135	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
2-Chlorophenol	NELAP	0.143	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
2-Methylnaphthalene	NELAP	0.134	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
2-Nitroaniline	NELAP	0.103	1.13		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
2-Nitrophenol	NELAP	0.126	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
3,3'-Dichlorobenzidine	NELAP	0.225	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
3-Nitroaniline	NELAP	0.092	1.13		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
4,6-Dinitro-2-methylphenol	NELAP	0.122	1.13		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
4-Bromophenyl phenyl ether	NELAP	0.104	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
4-Chloro-3-methylphenol	NELAP	0.124	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
4-Chloroaniline	NELAP	0.136	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
4-Chlorophenyl phenyl ether	NELAP	0.112	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
4-Nitroaniline	NELAP	0.103	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
4-Nitrophenol	NELAP	0.11	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Acenaphthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Acenaphthylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Benzo(a)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Benzo(a)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Benzo(b)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Benzo(g,h,i)perylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Benzo(k)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Bis(2-chloroethoxy)methane	NELAP	0.132	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Bis(2-chloroethyl)ether	NELAP	0.16	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Bis(2-chloroisopropyl)ether	NELAP	0.128	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Bis(2-ethylhexyl)phthalate	NELAP	0.132	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Butyl benzyl phthalate	NELAP	0.114	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Carbazole		0.137	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Chrysene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Dibenzo(a,h)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Dibenzofuran	NELAP	0.142	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Diethyl phthalate	NELAP	0.108	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468

Client: Andrews Engineering, Inc.

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Client Project: IDOT2013-033

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Lab ID: 14021328-002

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Matrix: SOLID

Collection Date: 02/27/2014 11:15

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	0.103	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Di-n-butyl phthalate	NELAP	0.116	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Di-n-octyl phthalate	NELAP	0.117	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Fluorene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Hexachlorobenzene	NELAP	0.11	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Hexachlorobutadiene	NELAP	0.175	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Hexachlorocyclopentadiene	NELAP	0.115	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Hexachloroethane	NELAP	0.188	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Isophorone	NELAP	0.133	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
m,p-Cresol	NELAP	0.142	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Naphthalene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Nitrobenzene	NELAP	0.141	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
N-Nitroso-di-n-propylamine	NELAP	0.124	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
N-Nitrosodiphenylamine	NELAP	0.104	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
o-Cresol	NELAP	0.133	0.563		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Pentachlorophenol	NELAP	0.743	2.25		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Phenanthrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Phenol	NELAP	0.131	0.394		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	02/28/2014 19:39	96468
Surr: 2,4,6-Tribromophenol		0	46-125		84.3	%REC	1	02/28/2014 19:39	96468
Surr: 2-Fluorobiphenyl		0	49.6-91.4		89	%REC	1	02/28/2014 19:39	96468
Surr: 2-Fluorophenol		0	51.4-93.1	S	48.9	%REC	1	02/28/2014 19:39	96468
Surr: Nitrobenzene-d5		0	32.8-110		47.6	%REC	1	02/28/2014 19:39	96468
Surr: Phenol-d5		0	57.2-100		70.3	%REC	1	02/28/2014 19:39	96468
Surr: p-Terphenyl-d14		0	61.8-117		83.3	%REC	1	02/28/2014 19:39	96468

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	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
1,1,1,2-Tetrachloroethane	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
1,1,2-Trichloroethane	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
1,1-Dichloroethane	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
1,1-Dichloroethene	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
1,2-Dichloroethane	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
1,2-Dichloropropane	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
1,3-Dichloropropene, Total		0.0006	0.002		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
2-Butanone	NELAP	0.0061	0.03	J	0.008	mg/Kg-dry	1	03/03/2014 16:39	96551
2-Hexanone	NELAP	0.0061	0.03		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
4-Methyl-2-pentanone	NELAP	0.0061	0.03		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Acetone	NELAP	0.0061	0.03	J	0.029	mg/Kg-dry	1	03/03/2014 16:39	96551
Benzene	NELAP	0.0003	0.001		0.002	mg/Kg-dry	1	03/03/2014 16:39	96551
Bromodichloromethane	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Bromoform	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Bromomethane	NELAP	0.0012	0.006		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Carbon disulfide	NELAP	0.0018	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Carbon tetrachloride	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021328-002

Client Sample ID: 2396-8-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 11:15

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chlorobenzene	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Chloroethane	NELAP	0.0012	0.006		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Chloroform	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Chloromethane	NELAP	0.0012	0.006		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
cis-1,2-Dichloroethene	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
cis-1,3-Dichloropropene	NELAP	0.0006	0.002		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Dibromochloromethane	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Ethylbenzene	NELAP	0.0006	0.003	J	0.001	mg/Kg-dry	1	03/03/2014 16:39	96551
m,p-Xylenes	NELAP	0.0006	0.003	J	0.001	mg/Kg-dry	1	03/03/2014 16:39	96551
Methyl tert-butyl ether	NELAP	0.0003	0.001		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Methylene chloride	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
o-Xylene	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Styrene	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Tetrachloroethene	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Toluene	NELAP	0.0006	0.003	J	0.003	mg/Kg-dry	1	03/03/2014 16:39	96551
trans-1,2-Dichloroethene	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
trans-1,3-Dichloropropene	NELAP	0.0006	0.002		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Trichloroethene	NELAP	0.0006	0.003		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Vinyl acetate	NELAP	0.0121	0.03		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Vinyl chloride	NELAP	0.0003	0.001		ND	mg/Kg-dry	1	03/03/2014 16:39	96551
Xylenes, Total	NELAP	0.0006	0.003	J	0.001	mg/Kg-dry	1	03/03/2014 16:39	96551
Surr: 1,2-Dichloroethane-d4		0	72.2-131		105.4	%REC	1	03/03/2014 16:39	96551
Surr: 4-Bromofluorobenzene		0	82.1-116		107.6	%REC	1	03/03/2014 16:39	96551
Surr: Dibromofluoromethane		0	77.7-120		101	%REC	1	03/03/2014 16:39	96551
Surr: Toluene-d8		0	86-116		96.3	%REC	1	03/03/2014 16:39	96551

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021328-003

Client Sample ID: 2396-8-B03-2

Matrix: SOLID

Collection Date: 02/27/2014 10:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		12.4	%	1	03/03/2014 13:11	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		87.6	%	1	03/03/2014 13:11	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.39		1	03/03/2014 19:24	R187768
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0332	mg/L	1	03/04/2014 19:04	96534
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 19:04	96534
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 19:04	96534
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 19:04	96534
Chromium	NELAP	0.004	0.01		< 0.01	mg/L	1	03/04/2014 19:04	96534
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 19:04	96534
Iron	NELAP	0.007	0.1		1.78	mg/L	1	03/04/2014 19:04	96534
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 19:04	96534
Manganese	NELAP	0.0016	0.005		0.0112	mg/L	1	03/04/2014 19:04	96534
Nickel	NELAP	0.0033	0.01		< 0.01	mg/L	1	03/04/2014 19:04	96534
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 19:04	96534
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 19:04	96534
Zinc	NELAP	0.0021	0.01	J	0.0084	mg/L	1	03/04/2014 19:04	96534
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	03/04/2014 10:51	96536
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 19:11	96536
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 14:23	96537
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	03/04/2014 19:41	96509
Arsenic	NELAP	1.14	2.27		3.94	mg/Kg-dry	1	03/04/2014 14:13	96484
Barium	NELAP	0.23	0.45		47.2	mg/Kg-dry	1	03/03/2014 21:53	96484
Beryllium	NELAP	0.05	0.09		0.52	mg/Kg-dry	1	03/03/2014 21:53	96484
Boron	NELAP	0.91	1.82		11.8	mg/Kg-dry	1	03/03/2014 21:53	96484
Cadmium	NELAP	0.09	0.18		< 0.18	mg/Kg-dry	1	03/04/2014 14:13	96484
Calcium	NELAP	2.27	4.55		74100	mg/Kg-dry	1	03/03/2014 21:53	96484
Chromium	NELAP	0.45	0.91	X	13.9	mg/Kg-dry	1	03/03/2014 21:53	96484
Cobalt	NELAP	0.45	0.91		5.94	mg/Kg-dry	1	03/03/2014 21:53	96484
Copper	NELAP	0.45	0.91		12.4	mg/Kg-dry	1	03/03/2014 21:53	96484
Iron	NELAP	0.91	1.82		14200	mg/Kg-dry	1	03/03/2014 21:53	96484
Lead	NELAP	1.82	3.64		4.81	mg/Kg-dry	1	03/03/2014 21:53	96484
Magnesium	NELAP	0.45	0.91		33700	mg/Kg-dry	1	03/03/2014 21:53	96484
Manganese	NELAP	0.23	0.45		327	mg/Kg-dry	1	03/03/2014 21:53	96484
Nickel	NELAP	0.45	0.91		15.7	mg/Kg-dry	1	03/03/2014 21:53	96484
Potassium	NELAP	4.55	9.09		2000	mg/Kg-dry	1	03/03/2014 21:53	96484
Silver	NELAP	0.45	0.5		< 0.5	mg/Kg-dry	1	03/03/2014 21:53	96484
Sodium	NELAP	2.27	4.55		157	mg/Kg-dry	1	03/03/2014 21:53	96484
Thallium	NELAP	2.27	2.36		< 2.36	mg/Kg-dry	1	03/03/2014 21:53	96484
Vanadium	NELAP	0.45	0.91		18.6	mg/Kg-dry	1	03/03/2014 21:53	96484
Zinc	NELAP	0.45	0.91	B	31.6	mg/Kg-dry	1	03/04/2014 14:13	96484

Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021328-003

Client Sample ID: 2396-8-B03-2

Matrix: SOLID

Collection Date: 02/27/2014 10:55

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	03/03/2014 11:06	96485
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.016	mg/Kg-dry	1	03/03/2014 14:50	96522
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.152	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
1,2-Dichlorobenzene	NELAP	0.182	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
1,3-Dichlorobenzene	NELAP	0.192	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
1,4-Dichlorobenzene	NELAP	0.182	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
2,4,5-Trichlorophenol	NELAP	0.109	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
2,4,6-Trichlorophenol	NELAP	0.144	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
2,4-Dichlorophenol	NELAP	0.138	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
2,4-Dimethylphenol	NELAP	0.145	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
2,4-Dinitrophenol	NELAP	0.122	1.14		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
2,4-Dinitrotoluene	NELAP	0.119	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
2,6-Dinitrotoluene	NELAP	0.123	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
2-Chloronaphthalene	NELAP	0.137	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
2-Chlorophenol	NELAP	0.145	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
2-Methylnaphthalene	NELAP	0.136	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
2-Nitroaniline	NELAP	0.104	1.14		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
2-Nitrophenol	NELAP	0.128	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
3,3'-Dichlorobenzidine	NELAP	0.229	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
3-Nitroaniline	NELAP	0.094	1.14		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
4,6-Dinitro-2-methylphenol	NELAP	0.123	1.14		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
4-Bromophenyl phenyl ether	NELAP	0.105	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
4-Chloro-3-methylphenol	NELAP	0.126	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
4-Chloroaniline	NELAP	0.138	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
4-Chlorophenyl phenyl ether	NELAP	0.113	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
4-Nitroaniline	NELAP	0.104	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
4-Nitrophenol	NELAP	0.112	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Acenaphthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Acenaphthylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Benzo(a)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Benzo(a)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Benzo(b)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Benzo(g,h,i)perylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Benzo(k)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Bis(2-chloroethoxy)methane	NELAP	0.134	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Bis(2-chloroethyl)ether	NELAP	0.162	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Bis(2-chloroisopropyl)ether	NELAP	0.13	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Bis(2-ethylhexyl)phthalate	NELAP	0.134	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Butyl benzyl phthalate	NELAP	0.115	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Carbazole		0.139	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Chrysene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Dibenzo(a,h)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Dibenzofuran	NELAP	0.144	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Diethyl phthalate	NELAP	0.11	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021328-003

Client Sample ID: 2396-8-B03-2

Matrix: SOLID

Collection Date: 02/27/2014 10:55

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	0.104	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Di-n-butyl phthalate	NELAP	0.118	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Di-n-octyl phthalate	NELAP	0.119	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Fluorene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Hexachlorobenzene	NELAP	0.112	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Hexachlorobutadiene	NELAP	0.177	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Hexachlorocyclopentadiene	NELAP	0.117	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Hexachloroethane	NELAP	0.191	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Isophorone	NELAP	0.135	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
m,p-Cresol	NELAP	0.144	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Naphthalene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Nitrobenzene	NELAP	0.143	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
N-Nitroso-di-n-propylamine	NELAP	0.126	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
N-Nitrosodiphenylamine	NELAP	0.105	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
o-Cresol	NELAP	0.135	0.572		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Pentachlorophenol	NELAP	0.754	2.29		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Phenanthrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Phenol	NELAP	0.133	0.4		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:12	96468
Surr: 2,4,6-Tribromophenol		0	46-125		70.7	%REC	1	02/28/2014 20:12	96468
Surr: 2-Fluorobiphenyl		0	49.6-91.4		52.8	%REC	1	02/28/2014 20:12	96468
Surr: 2-Fluorophenol		0	51.4-93.1	S	48.9	%REC	1	02/28/2014 20:12	96468
Surr: Nitrobenzene-d5		0	32.8-110		47.4	%REC	1	02/28/2014 20:12	96468
Surr: Phenol-d5		0	57.2-100		68.9	%REC	1	02/28/2014 20:12	96468
Surr: p-Terphenyl-d14		0	61.8-117	S	134.6	%REC	1	02/28/2014 20:12	96468

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	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
1,1,1,2-Tetrachloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
1,1,2-Trichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
1,1-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
1,1-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
1,2-Dichloroethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
1,2-Dichloropropane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
1,3-Dichloropropene, Total		0.0007	0.003		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
2-Butanone	NELAP	0.0074	0.037	J	0.01	mg/Kg-dry	1	03/03/2014 17:06	96551
2-Hexanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
4-Methyl-2-pentanone	NELAP	0.0074	0.037		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Acetone	NELAP	0.0074	0.037	J	0.035	mg/Kg-dry	1	03/03/2014 17:06	96551
Benzene	NELAP	0.0004	0.001		0.002	mg/Kg-dry	1	03/03/2014 17:06	96551
Bromodichloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Bromoform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Bromomethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Carbon disulfide	NELAP	0.0022	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Carbon tetrachloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021328-003

Client Sample ID: 2396-8-B03-2

Matrix: SOLID

Collection Date: 02/27/2014 10:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chlorobenzene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Chloroethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Chloroform	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Chloromethane	NELAP	0.0015	0.007		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
cis-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
cis-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Dibromochloromethane	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Ethylbenzene	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	03/03/2014 17:06	96551
m,p-Xylenes	NELAP	0.0007	0.004	J	0.002	mg/Kg-dry	1	03/03/2014 17:06	96551
Methyl tert-butyl ether	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Methylene chloride	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
o-Xylene	NELAP	0.0007	0.004	J	0.001	mg/Kg-dry	1	03/03/2014 17:06	96551
Styrene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Tetrachloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Toluene	NELAP	0.0007	0.004		0.004	mg/Kg-dry	1	03/03/2014 17:06	96551
trans-1,2-Dichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
trans-1,3-Dichloropropene	NELAP	0.0007	0.003		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Trichloroethene	NELAP	0.0007	0.004		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Vinyl acetate	NELAP	0.0149	0.037		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Vinyl chloride	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	03/03/2014 17:06	96551
Xylenes, Total	NELAP	0.0007	0.004	J	0.003	mg/Kg-dry	1	03/03/2014 17:06	96551
Surr: 1,2-Dichloroethane-d4		0	72.2-131		107.5	%REC	1	03/03/2014 17:06	96551
Surr: 4-Bromofluorobenzene		0	82.1-116		106.4	%REC	1	03/03/2014 17:06	96551
Surr: Dibromofluoromethane		0	77.7-120		99.2	%REC	1	03/03/2014 17:06	96551
Surr: Toluene-d8		0	86-116		97.2	%REC	1	03/03/2014 17:06	96551

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021328-004

Client Sample ID: 2396-8-B05-2

Matrix: SOLID

Collection Date: 02/27/2014 10:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		13.6	%	1	03/03/2014 13:12	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		86.4	%	1	03/03/2014 13:12	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.39		1	03/03/2014 19:28	R187768
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05	J	0.0493	mg/L	1	03/04/2014 15:08	96535
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 15:08	96535
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 15:08	96535
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 15:08	96535
Chromium	NELAP	0.004	0.01		< 0.01	mg/L	1	03/04/2014 15:08	96535
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 15:08	96535
Iron	NELAP	0.007	0.1		3.61	mg/L	1	03/04/2014 15:08	96535
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 15:08	96535
Manganese	NELAP	0.0016	0.005		0.0356	mg/L	1	03/04/2014 15:08	96535
Nickel	NELAP	0.0033	0.01	J	0.0034	mg/L	1	03/04/2014 15:08	96535
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 15:08	96535
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 15:08	96535
Zinc	NELAP	0.0021	0.01		0.0127	mg/L	1	03/04/2014 15:08	96535
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	03/04/2014 11:32	96545
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 19:38	96545
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 14:30	96548
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.36	4.55		< 4.55	mg/Kg-dry	1	03/04/2014 19:44	96509
Arsenic	NELAP	1.25	2.5		4.16	mg/Kg-dry	1	03/04/2014 14:24	96484
Barium	NELAP	0.25	0.5		41.1	mg/Kg-dry	1	03/03/2014 21:56	96484
Beryllium	NELAP	0.05	0.1		0.38	mg/Kg-dry	1	03/03/2014 21:56	96484
Boron	NELAP	1	2		8.12	mg/Kg-dry	1	03/03/2014 21:56	96484
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	03/04/2014 14:24	96484
Calcium	NELAP	2.5	5	S	63400	mg/Kg-dry	1	03/03/2014 21:56	96484
Chromium	NELAP	0.5	1		9.94	mg/Kg-dry	1	03/03/2014 21:56	96484
Cobalt	NELAP	0.5	1		5.94	mg/Kg-dry	1	03/03/2014 21:56	96484
Copper	NELAP	0.5	1		10.5	mg/Kg-dry	1	03/03/2014 21:56	96484
Iron	NELAP	1	2	S	11300	mg/Kg-dry	1	03/03/2014 21:56	96484
Lead	NELAP	2	4		4.85	mg/Kg-dry	1	03/03/2014 21:56	96484
Magnesium	NELAP	0.5	1	S	29500	mg/Kg-dry	1	03/03/2014 21:56	96484
Manganese	NELAP	0.25	0.5	S	361	mg/Kg-dry	1	03/03/2014 21:56	96484
Nickel	NELAP	0.5	1		12.4	mg/Kg-dry	1	03/03/2014 21:56	96484
Potassium	NELAP	5	10	S	1310	mg/Kg-dry	1	03/03/2014 21:56	96484
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	03/03/2014 21:56	96484
Sodium	NELAP	2.5	5		564	mg/Kg-dry	1	03/03/2014 21:56	96484
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	03/03/2014 21:56	96484
Vanadium	NELAP	0.5	1		17.5	mg/Kg-dry	1	03/03/2014 21:56	96484
Zinc	NELAP	0.5	1	B	29	mg/Kg-dry	1	03/04/2014 14:24	96484

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021328-004

Client Sample ID: 2396-8-B05-2

Matrix: SOLID

Collection Date: 02/27/2014 10:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
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SW-846 3050B, 6010B, METALS BY ICP

Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).
MS QC limits for Ca, Fe, Mg, Mn, and K are not applicable due to high sample/spike ratio.

SW-846 3050B, 7010 METALS BY GFAA

Selenium	NELAP	0.318	0.545	S	< 0.545	mg/Kg-dry	1	03/03/2014 11:09	96485
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Se - Matrix interference present in sample. Confirmed by bench spike.

SW-846 7471B

Mercury	NELAP	0.003	0.011	J	0.008	mg/Kg-dry	1	03/03/2014 14:52	96522
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SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS

1,2,4-Trichlorobenzene	NELAP	0.153	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
1,2-Dichlorobenzene	NELAP	0.182	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
1,3-Dichlorobenzene	NELAP	0.193	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
1,4-Dichlorobenzene	NELAP	0.182	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
2,4,5-Trichlorophenol	NELAP	0.109	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
2,4,6-Trichlorophenol	NELAP	0.145	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
2,4-Dichlorophenol	NELAP	0.139	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
2,4-Dimethylphenol	NELAP	0.146	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
2,4-Dinitrophenol	NELAP	0.123	1.15		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
2,4-Dinitrotoluene	NELAP	0.119	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
2,6-Dinitrotoluene	NELAP	0.124	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
2-Chloronaphthalene	NELAP	0.138	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
2-Chlorophenol	NELAP	0.146	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
2-Methylnaphthalene	NELAP	0.137	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
2-Nitroaniline	NELAP	0.104	1.15		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
2-Nitrophenol	NELAP	0.128	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
3,3'-Dichlorobenzidine	NELAP	0.229	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
3-Nitroaniline	NELAP	0.094	1.15		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
4,6-Dinitro-2-methylphenol	NELAP	0.124	1.15		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
4-Bromophenyl phenyl ether	NELAP	0.106	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
4-Chloro-3-methylphenol	NELAP	0.126	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
4-Chloroaniline	NELAP	0.139	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
4-Chlorophenyl phenyl ether	NELAP	0.114	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
4-Nitroaniline	NELAP	0.104	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
4-Nitrophenol	NELAP	0.112	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Acenaphthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Acenaphthylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Benzo(a)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Benzo(a)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Benzo(b)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Benzo(g,h,i)perylene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Benzo(k)fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Bis(2-chloroethoxy)methane	NELAP	0.134	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Bis(2-chloroethyl)ether	NELAP	0.163	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Bis(2-chloroisopropyl)ether	NELAP	0.131	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Bis(2-ethylhexyl)phthalate	NELAP	0.134	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Butyl benzyl phthalate	NELAP	0.116	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Carbazole		0.14	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021328-004

Client Sample ID: 2396-8-B05-2

Matrix: SOLID

Collection Date: 02/27/2014 10:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Dibenzo(a,h)anthracene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Dibenzofuran	NELAP	0.145	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Diethyl phthalate	NELAP	0.11	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Dimethyl phthalate	NELAP	0.104	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Di-n-butyl phthalate	NELAP	0.118	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Di-n-octyl phthalate	NELAP	0.119	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Fluoranthene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Fluorene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Hexachlorobenzene	NELAP	0.112	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Hexachlorobutadiene	NELAP	0.178	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Hexachlorocyclopentadiene	NELAP	0.117	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Hexachloroethane	NELAP	0.192	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Isophorone	NELAP	0.135	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
m,p-Cresol	NELAP	0.145	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Naphthalene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Nitrobenzene	NELAP	0.143	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
N-Nitroso-di-n-propylamine	NELAP	0.126	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
N-Nitrosodiphenylamine	NELAP	0.106	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
o-Cresol	NELAP	0.135	0.574		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Pentachlorophenol	NELAP	0.757	2.29		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Phenanthrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Phenol	NELAP	0.133	0.402		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Pyrene	NELAP	0.019	0.039		ND	mg/Kg-dry	1	02/28/2014 20:46	96468
Surr: 2,4,6-Tribromophenol		0	46-125		72.6	%REC	1	02/28/2014 20:46	96468
Surr: 2-Fluorobiphenyl		0	49.6-91.4		55.4	%REC	1	02/28/2014 20:46	96468
Surr: 2-Fluorophenol		0	51.4-93.1	S	49.7	%REC	1	02/28/2014 20:46	96468
Surr: Nitrobenzene-d5		0	32.8-110		47.2	%REC	1	02/28/2014 20:46	96468
Surr: Phenol-d5		0	57.2-100		70.5	%REC	1	02/28/2014 20:46	96468
Surr: p-Terphenyl-d14		0	61.8-117	S	136.3	%REC	1	02/28/2014 20:46	96468

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	03/03/2014 18:32	96560
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
2-Butanone	NELAP	0.0078	0.039		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
2-Hexanone	NELAP	0.0078	0.039		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
4-Methyl-2-pentanone	NELAP	0.0078	0.039		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Acetone	NELAP	0.0078	0.039	J	0.023	mg/Kg-dry	1	03/03/2014 18:32	96560
Benzene	NELAP	0.0004	0.001		0.001	mg/Kg-dry	1	03/03/2014 18:32	96560
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021328

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021328-004

Client Sample ID: 2396-8-B05-2

Matrix: SOLID

Collection Date: 02/27/2014 10:25

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Bromomethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Carbon disulfide	NELAP	0.0023	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Chloroethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Chloromethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Ethylbenzene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	03/03/2014 18:32	96560
m,p-Xylenes	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	03/03/2014 18:32	96560
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Toluene	NELAP	0.0008	0.004	J	0.003	mg/Kg-dry	1	03/03/2014 18:32	96560
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Vinyl acetate	NELAP	0.0156	0.039		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	03/03/2014 18:32	96560
Xylenes, Total	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	03/03/2014 18:32	96560
Surr: 1,2-Dichloroethane-d4		0	72.2-131		108.5	%REC	1	03/03/2014 18:32	96560
Surr: 4-Bromofluorobenzene		0	82.1-116		96.5	%REC	1	03/03/2014 18:32	96560
Surr: Dibromofluoromethane		0	77.7-120		99.4	%REC	1	03/03/2014 18:32	96560
Surr: Toluene-d8		0	86-116		95.3	%REC	1	03/03/2014 18:32	96560



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: FAP 525 (US Route 20) Office Phone Number, if available: _____

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

44 W 353 - 44 W 459 US 20

City: Unincorporated State: IL Zip Code: 60140

County: Kane Township: Hampshire

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

Latitude: 42.09873 Longitude: -88.48025
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

- GPS Map Interpolation Photo Interpolation Survey Other

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

II. Owner/Operator Information for Source Site

Site Owner

Site Operator

Name: Illinois Department of Transportation

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

Street Address: 201 West Center Court

PO Box: _____

PO Box: _____

City: Schaumburg State: IL

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4101

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: FAP 525 (US Route 20)

Latitude: 42.09873 Longitude: -88.48025

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

LOCATIONS 2396-11-B02 AND 2396-11-B03 WERE SAMPLED ADJACENT TO ISGS SITE 2396V-11. SEE FIGURE 3 AND TABLE 3g OF THE REVISED PRELIMINARY SITE INVESTIGATION.

- 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 ANALYTICAL REPORT - WORK ORDER NO. 13101298

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

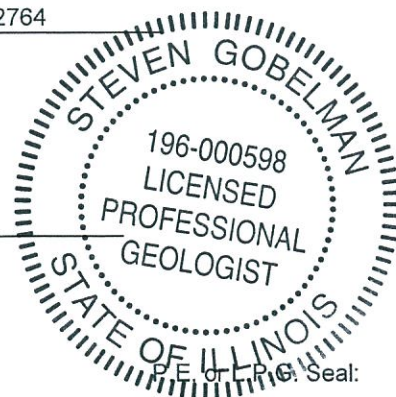
Phone: 217.785.4246

Steven Gobelman

Printed Name:


 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

8/23/11
 Date:



THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl Acetate
Vinyl Chloride
Xylenes, total
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 2396V-11

Residences

Sample ID	2396-11-B02	2396-11-B03	¹ Most Stringent MAC	² Outside a Populated Area MAC	³ Populated non- Metropolitan Statistical Area MAC	⁴ Within Chicago Corporate Limits MAC	⁵ Metropolitan Statistical Area MAC	⁶ Class I Soil TCLP/SPLP Comparisons Only
Sample Depth (ft)	0-5	0-5						
Sample Date	10/24/2013	10/24/2013						
PID	0	0						
Sample pH	8.58	7.54						
Matrix	Soil	Soil						
No Contaminants of Concern Noted.								

November 04, 2013

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



RE: IDOT2013-033

WorkOrder: 13101298

Dear Colleen Grey:

TEKLAB, INC received 3 samples on 10/25/2013 9:10:00 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
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101298

Client Project: IDOT2013-033

Report Date: 04-Nov-13

This reporting package includes the following:

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	4
Laboratory Results	5
Quality Control Results	17
Receiving Check List	47
Chain of Custody	Appended

Client: Andrews Engineering, Inc.

Work Order: 13101298

Client Project: IDOT2013-033

Report Date: 04-Nov-13

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: 13101298

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Cooler Receipt Temp: 4.4 °C

Locations and Accreditations

	<u>Collinsville</u>	<u>Springfield</u>	<u>Kansas City</u>	<u>Collinsville Air</u>
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	3920 Pintail Dr Springfield, IL 62711-9415	8421 Nieman Road Lenexa, KS 66214	5445 Horseshoe Lake Road 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

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

Client: Andrews Engineering, Inc.

Work Order: 13101298

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101298-002

Client Sample ID: 2396-11-B02

Matrix: SOLID

Collection Date: 10/24/2013 7:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		11.4	%	1	10/25/2013 15:38	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		88.6	%	1	10/25/2013 15:38	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.58		1	10/25/2013 19:54	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	11/01/2013 11:30	93273
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	11/01/2013 11:30	93273
Manganese	NELAP	0.0016	0.005		3.37	mg/L	1	11/01/2013 11:30	93273
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.258	mg/L	1	10/29/2013 17:23	93144
Beryllium	NELAP	0.0003	0.001		0.0011	mg/L	1	10/29/2013 17:23	93144
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 17:23	93144
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	10/29/2013 17:23	93144
Chromium	NELAP	0.004	0.01		0.0465	mg/L	1	10/29/2013 17:23	93144
Cobalt	NELAP	0.0022	0.01		0.0115	mg/L	1	10/29/2013 17:23	93144
Iron	NELAP	0.007	0.02	X	42.7	mg/L	1	10/29/2013 17:23	93144
Lead	NELAP	0.006	0.007	X	0.0208	mg/L	1	10/29/2013 17:23	93144
Manganese	NELAP	0.0016	0.005	X	0.363	mg/L	1	10/29/2013 17:23	93144
Nickel	NELAP	0.0033	0.01		0.0408	mg/L	1	10/29/2013 17:23	93144
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 17:23	93144
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 17:23	93144
Zinc	NELAP	0.0021	0.01		0.111	mg/L	1	10/29/2013 17:23	93144
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	10/30/2013 14:32	93146
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	10/30/2013 17:46	93146
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002	J	0.00007	mg/L	1	10/29/2013 15:22	93154
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.36	4.55		< 4.55	mg/Kg-dry	1	10/29/2013 23:18	93118
Arsenic	NELAP	1.25	2.5		4.95	mg/Kg-dry	1	10/29/2013 11:50	93107
Barium	NELAP	0.25	0.5		64.4	mg/Kg-dry	1	10/29/2013 11:50	93107
Beryllium	NELAP	0.05	0.1		0.49	mg/Kg-dry	1	10/29/2013 11:50	93107
Boron	NELAP	1	2		9.6	mg/Kg-dry	1	10/29/2013 11:50	93107
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	10/29/2013 11:50	93107
Calcium	NELAP	2.5	5	S	69200	mg/Kg-dry	1	10/29/2013 11:50	93107
Chromium	NELAP	0.5	1	X	15.1	mg/Kg-dry	1	10/29/2013 11:50	93107
Cobalt	NELAP	0.5	1		6.44	mg/Kg-dry	1	10/29/2013 11:50	93107
Copper	NELAP	0.5	1		13.7	mg/Kg-dry	1	10/29/2013 11:50	93107
Iron	NELAP	1	2	BSX	15600	mg/Kg-dry	1	10/29/2013 11:50	93107
Lead	NELAP	2	4		8.99	mg/Kg-dry	1	10/29/2013 11:50	93107
Magnesium	NELAP	0.5	1	BS	31800	mg/Kg-dry	1	10/29/2013 11:50	93107
Manganese	NELAP	0.25	0.5		382	mg/Kg-dry	1	10/29/2013 11:50	93107
Nickel	NELAP	0.5	1		16.2	mg/Kg-dry	1	10/29/2013 11:50	93107
Potassium	NELAP	23.1	46.3	S	2170	mg/Kg-dry	5	11/01/2013 10:20	93289
Silver	NELAP	0.5	0.55		< 0.55	mg/Kg-dry	1	10/29/2013 11:50	93107

Client: Andrews Engineering, Inc.

Work Order: 13101298

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101298-002

Client Sample ID: 2396-11-B02

Matrix: SOLID

Collection Date: 10/24/2013 7:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Sodium	NELAP	2.5	5	S	1700	mg/Kg-dry	1	10/29/2013 11:50	93107
Thallium	NELAP	2.5	2.6		< 2.6	mg/Kg-dry	1	10/29/2013 11:50	93107
Vanadium	NELAP	0.5	1		22.9	mg/Kg-dry	1	10/29/2013 11:50	93107
Zinc	NELAP	0.5	1		37.5	mg/Kg-dry	1	10/29/2013 11:50	93107
<i>MS QC limits for K are not applicable due to high sample/spike ratio.</i>									
<i>Sample results for Fe and Mg exceed 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
<i>MS QC limits for Ca, Fe, Mg, and Na are not applicable due to high sample/spike ratio.</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.35	0.6	S	< 0.6	mg/Kg-dry	1	10/31/2013 13:39	93116
<i>Se - Matrix interference present in sample. Confirmed by bench spike.</i>									
SW-846 7471B									
Mercury	NELAP	0.003	0.011		0.015	mg/Kg-dry	1	10/29/2013 12:40	93155
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.15	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
1,2-Dichlorobenzene	NELAP	0.179	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
1,3-Dichlorobenzene	NELAP	0.19	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
1,4-Dichlorobenzene	NELAP	0.179	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
2,4,5-Trichlorophenol	NELAP	0.107	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
2,4,6-Trichlorophenol	NELAP	0.142	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
2,4-Dichlorophenol	NELAP	0.137	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
2,4-Dimethylphenol	NELAP	0.143	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
2,4-Dinitrophenol	NELAP	0.121	1.13		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
2,4-Dinitrotoluene	NELAP	0.117	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
2,6-Dinitrotoluene	NELAP	0.122	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
2-Chloronaphthalene	NELAP	0.135	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
2-Chlorophenol	NELAP	0.143	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
2-Methylnaphthalene	NELAP	0.134	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
2-Nitroaniline	NELAP	0.103	1.13		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
2-Nitrophenol	NELAP	0.126	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
3,3'-Dichlorobenzidine	NELAP	0.226	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
3-Nitroaniline	NELAP	0.093	1.13		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
4,6-Dinitro-2-methylphenol	NELAP	0.122	1.13		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
4-Bromophenyl phenyl ether	NELAP	0.104	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
4-Chloro-3-methylphenol	NELAP	0.124	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
4-Chloroaniline	NELAP	0.137	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
4-Chlorophenyl phenyl ether	NELAP	0.112	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
4-Nitroaniline	NELAP	0.103	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
4-Nitrophenol	NELAP	0.111	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Acenaphthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Acenaphthylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Benzo(a)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Benzo(a)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Benzo(b)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Benzo(g,h,i)perylene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Benzo(k)fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178

Client: Andrews Engineering, Inc.

Work Order: 13101298

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101298-002

Client Sample ID: 2396-11-B02

Matrix: SOLID

Collection Date: 10/24/2013 7:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bis(2-chloroethoxy)methane	NELAP	0.132	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Bis(2-chloroethyl)ether	NELAP	0.16	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Bis(2-chloroisopropyl)ether	NELAP	0.129	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Bis(2-ethylhexyl)phthalate	NELAP	0.132	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Butyl benzyl phthalate	NELAP	0.114	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Carbazole		0.138	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Chrysene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Dibenzo(a,h)anthracene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Dibenzofuran	NELAP	0.142	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Diethyl phthalate	NELAP	0.108	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Dimethyl phthalate	NELAP	0.103	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Di-n-butyl phthalate	NELAP	0.116	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Di-n-octyl phthalate	NELAP	0.117	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Fluoranthene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Fluorene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Hexachlorobenzene	NELAP	0.111	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Hexachlorobutadiene	NELAP	0.175	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Hexachlorocyclopentadiene	NELAP	0.115	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Hexachloroethane	NELAP	0.189	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Indeno(1,2,3-cd)pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Isophorone	NELAP	0.133	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
m,p-Cresol	NELAP	0.142	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Naphthalene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Nitrobenzene	NELAP	0.141	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
N-Nitroso-di-n-propylamine	NELAP	0.124	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
N-Nitrosodiphenylamine	NELAP	0.104	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
o-Cresol	NELAP	0.133	0.564		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Pentachlorophenol	NELAP	0.745	2.26		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Phenanthrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Phenol	NELAP	0.131	0.395		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Pyrene	NELAP	0.019	0.038		ND	mg/Kg-dry	1	11/02/2013 10:14	93178
Surr: 2,4,6-Tribromophenol		0	32.7-130		64.3	%REC	1	11/02/2013 10:14	93178
Surr: 2-Fluorobiphenyl		0	34.1-116		57.6	%REC	1	11/02/2013 10:14	93178
Surr: 2-Fluorophenol		0	30.5-99		53.6	%REC	1	11/02/2013 10:14	93178
Surr: Nitrobenzene-d5		0	34.1-101		52.8	%REC	1	11/02/2013 10:14	93178
Surr: Phenol-d5		0	34.9-110		61.8	%REC	1	11/02/2013 10:14	93178
Surr: p-Terphenyl-d14		0	41.7-124		71.3	%REC	1	11/02/2013 10:14	93178
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
1,1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
2-Butanone	NELAP	0.0081	0.04	J	0.011	mg/Kg-dry	1	10/28/2013 19:31	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101298

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101298-002

Client Sample ID: 2396-11-B02

Matrix: SOLID

Collection Date: 10/24/2013 7:55

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
2-Hexanone	NELAP	0.0081	0.04		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
4-Methyl-2-pentanone	NELAP	0.0081	0.04		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Acetone	NELAP	0.0081	0.04		0.068	mg/Kg-dry	1	10/28/2013 19:31	93156
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Bromomethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Carbon disulfide	NELAP	0.0024	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Chloroethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Chloromethane	NELAP	0.0016	0.008		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Ethylbenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
m,p-Xylenes	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 19:31	93156
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Toluene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 19:31	93156
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Vinyl acetate	NELAP	0.0162	0.04		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	10/28/2013 19:31	93156
Xylenes, Total	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	10/28/2013 19:31	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		89	%REC	1	10/28/2013 19:31	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		96.2	%REC	1	10/28/2013 19:31	93156
Surr: Dibromofluoromethane		0	77.7-120		94	%REC	1	10/28/2013 19:31	93156
Surr: Toluene-d8		0	86-116		99.3	%REC	1	10/28/2013 19:31	93156

Client: Andrews Engineering, Inc.

Work Order: 13101298

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101298-003

Client Sample ID: 2396-11-B03

Matrix: SOLID

Collection Date: 10/24/2013 8:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		19.5	%	1	10/25/2013 15:39	R183289
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		80.5	%	1	10/25/2013 15:39	R183289
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.54		1	10/25/2013 19:58	R183256
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	11/01/2013 12:43	93269
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	11/01/2013 12:43	93269
Manganese	NELAP	0.0016	0.005		0.079	mg/L	1	11/01/2013 12:43	93269
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.04	0.1		0.702	mg/L	2	10/30/2013 12:28	93144
Beryllium	NELAP	0.0003	0.001		0.0023	mg/L	1	10/29/2013 17:34	93144
Boron	NELAP	1	2		< 2	mg/L	1	10/29/2013 17:34	93144
Cadmium	NELAP	0.0003	0.002	J	0.0004	mg/L	1	10/29/2013 17:34	93144
Chromium	NELAP	0.008	0.02		0.098	mg/L	2	10/30/2013 12:28	93144
Cobalt	NELAP	0.0022	0.01		0.0151	mg/L	1	10/29/2013 17:34	93144
Iron	NELAP	0.014	0.04	X	89	mg/L	2	10/30/2013 12:28	93144
Lead	NELAP	0.006	0.007	X	0.0184	mg/L	1	10/29/2013 17:34	93144
Manganese	NELAP	0.0032	0.01	X	0.457	mg/L	2	10/30/2013 12:28	93144
Nickel	NELAP	0.0066	0.02		0.0652	mg/L	2	10/30/2013 12:28	93144
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	10/29/2013 17:34	93144
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	10/29/2013 17:34	93144
Zinc	NELAP	0.0042	0.02		0.215	mg/L	2	10/30/2013 12:28	93144
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	10/30/2013 14:35	93146
Thallium, SPLP by GFAA	NELAP	0.0005	0.002	J	0.0008	mg/L	1	10/30/2013 17:49	93146
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002	J	0.00018	mg/L	1	10/29/2013 15:24	93154
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.55	4.9		< 4.9	mg/Kg-dry	1	10/29/2013 23:37	93118
Arsenic	NELAP	1.2	2.4		10.8	mg/Kg-dry	1	10/29/2013 12:08	93107
Barium	NELAP	0.24	0.48		181	mg/Kg-dry	1	10/29/2013 12:08	93107
Beryllium	NELAP	0.05	0.1		0.86	mg/Kg-dry	1	10/29/2013 12:08	93107
Boron	NELAP	0.96	1.92		6.86	mg/Kg-dry	1	10/29/2013 12:08	93107
Cadmium	NELAP	0.1	0.19		0.22	mg/Kg-dry	1	10/29/2013 12:08	93107
Calcium	NELAP	2.4	4.81		4880	mg/Kg-dry	1	10/29/2013 12:08	93107
Chromium	NELAP	0.48	0.96	X	26.6	mg/Kg-dry	1	10/29/2013 12:08	93107
Cobalt	NELAP	0.48	0.96		11.8	mg/Kg-dry	1	10/29/2013 12:08	93107
Copper	NELAP	0.48	0.96		22	mg/Kg-dry	1	10/29/2013 12:08	93107
Iron	NELAP	0.96	1.92	BX	27000	mg/Kg-dry	1	10/29/2013 12:08	93107
Lead	NELAP	1.92	3.85		15.3	mg/Kg-dry	1	10/29/2013 12:08	93107
Magnesium	NELAP	0.48	0.96	B	5050	mg/Kg-dry	1	10/29/2013 12:08	93107
Manganese	NELAP	0.24	0.48	X	908	mg/Kg-dry	1	10/29/2013 12:08	93107
Nickel	NELAP	0.48	0.96		33.1	mg/Kg-dry	1	10/29/2013 12:08	93107
Potassium	NELAP	4.81	9.62		1980	mg/Kg-dry	1	10/29/2013 12:08	93107
Silver	NELAP	0.48	0.53		< 0.53	mg/Kg-dry	1	10/29/2013 12:08	93107



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101298

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101298-003

Client Sample ID: 2396-11-B03

Matrix: SOLID

Collection Date: 10/24/2013 8:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Sodium	NELAP	2.4	4.81		1710	mg/Kg-dry	1	10/29/2013 12:08	93107
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	10/29/2013 12:08	93107
Vanadium	NELAP	0.48	0.96		42.7	mg/Kg-dry	1	10/29/2013 12:08	93107
Zinc	NELAP	0.48	0.96		57.9	mg/Kg-dry	1	10/29/2013 12:08	93107
<i>Sample results for Fe and Mg exceed 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume 1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.318	0.545		< 0.545	mg/Kg-dry	1	10/31/2013 11:00	93116
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.031	mg/Kg-dry	1	10/29/2013 12:43	93155
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.165	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
1,2-Dichlorobenzene	NELAP	0.197	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
1,3-Dichlorobenzene	NELAP	0.208	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
1,4-Dichlorobenzene	NELAP	0.197	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
2,4,5-Trichlorophenol	NELAP	0.118	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
2,4,6-Trichlorophenol	NELAP	0.156	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
2,4-Dichlorophenol	NELAP	0.15	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
2,4-Dimethylphenol	NELAP	0.157	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
2,4-Dinitrophenol	NELAP	0.133	1.24		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
2,4-Dinitrotoluene	NELAP	0.129	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
2,6-Dinitrotoluene	NELAP	0.134	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
2-Chloronaphthalene	NELAP	0.149	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
2-Chlorophenol	NELAP	0.157	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
2-Methylnaphthalene	NELAP	0.148	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
2-Nitroaniline	NELAP	0.113	1.24		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
2-Nitrophenol	NELAP	0.139	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
3,3'-Dichlorobenzidine	NELAP	0.248	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
3-Nitroaniline	NELAP	0.102	1.24		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
4,6-Dinitro-2-methylphenol	NELAP	0.134	1.24		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
4-Bromophenyl phenyl ether	NELAP	0.114	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
4-Chloro-3-methylphenol	NELAP	0.136	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
4-Chloroaniline	NELAP	0.15	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
4-Chlorophenyl phenyl ether	NELAP	0.123	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
4-Nitroaniline	NELAP	0.113	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
4-Nitrophenol	NELAP	0.122	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Acenaphthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Acenaphthylene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Benzo(a)anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Benzo(a)pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Benzo(b)fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Benzo(g,h,i)perylene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Benzo(k)fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Bis(2-chloroethoxy)methane	NELAP	0.145	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Bis(2-chloroethyl)ether	NELAP	0.176	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Bis(2-chloroisopropyl)ether	NELAP	0.141	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101298

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101298-003

Client Sample ID: 2396-11-B03

Matrix: SOLID

Collection Date: 10/24/2013 8:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bis(2-ethylhexyl)phthalate	NELAP	0.145	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Butyl benzyl phthalate	NELAP	0.125	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Carbazole		0.151	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Chrysene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Dibenzo(a,h)anthracene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Dibenzofuran	NELAP	0.156	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Diethyl phthalate	NELAP	0.119	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Dimethyl phthalate	NELAP	0.113	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Di-n-butyl phthalate	NELAP	0.128	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Di-n-octyl phthalate	NELAP	0.129	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Fluoranthene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Fluorene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Hexachlorobenzene	NELAP	0.122	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Hexachlorobutadiene	NELAP	0.192	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Hexachlorocyclopentadiene	NELAP	0.126	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Hexachloroethane	NELAP	0.207	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Indeno(1,2,3-cd)pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Isophorone	NELAP	0.146	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
m,p-Cresol	NELAP	0.156	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Naphthalene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Nitrobenzene	NELAP	0.155	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
N-Nitroso-di-n-propylamine	NELAP	0.136	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
N-Nitrosodiphenylamine	NELAP	0.114	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
o-Cresol	NELAP	0.146	0.62		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Pentachlorophenol	NELAP	0.818	2.48		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Phenanthrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Phenol	NELAP	0.144	0.434		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Pyrene	NELAP	0.021	0.042		ND	mg/Kg-dry	1	11/02/2013 10:47	93178
Surr: 2,4,6-Tribromophenol		0	32.7-130		71.8	%REC	1	11/02/2013 10:47	93178
Surr: 2-Fluorobiphenyl		0	34.1-116		67.1	%REC	1	11/02/2013 10:47	93178
Surr: 2-Fluorophenol		0	30.5-99		68.5	%REC	1	11/02/2013 10:47	93178
Surr: Nitrobenzene-d5		0	34.1-101		65.4	%REC	1	11/02/2013 10:47	93178
Surr: Phenol-d5		0	34.9-110		76.8	%REC	1	11/02/2013 10:47	93178
Surr: p-Terphenyl-d14		0	41.7-124		79.5	%REC	1	11/02/2013 10:47	93178
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
1,1,1,2-Tetrachloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
1,1,2-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
1,1-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
1,1-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
1,2-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
1,2-Dichloropropane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
1,3-Dichloropropene, Total		0.001	0.004		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
2-Butanone	NELAP	0.0096	0.048		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
2-Hexanone	NELAP	0.0096	0.048		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
4-Methyl-2-pentanone	NELAP	0.0096	0.048		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Acetone	NELAP	0.0096	0.048	J	0.033	mg/Kg-dry	1	10/28/2013 19:57	93156



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 13101298

Client Project: IDOT2013-033

Report Date: 04-Nov-13

Lab ID: 13101298-003

Client Sample ID: 2396-11-B03

Matrix: SOLID

Collection Date: 10/24/2013 8:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Benzene	NELAP	0.0005	0.001		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Bromodichloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Bromoform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Bromomethane	NELAP	0.0019	0.01		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Carbon disulfide	NELAP	0.0029	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Carbon tetrachloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Chlorobenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Chloroethane	NELAP	0.0019	0.01		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Chloroform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Chloromethane	NELAP	0.0019	0.01		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
cis-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
cis-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Dibromochloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Ethylbenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
m,p-Xylenes	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Methylene chloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
o-Xylene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Styrene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Tetrachloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Toluene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
trans-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
trans-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Trichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Vinyl acetate	NELAP	0.0191	0.048		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Xylenes, Total	NELAP	0.001	0.005		ND	mg/Kg-dry	1	10/28/2013 19:57	93156
Surr: 1,2-Dichloroethane-d4		0	72.2-131		88	%REC	1	10/28/2013 19:57	93156
Surr: 4-Bromofluorobenzene		0	82.1-116		97.2	%REC	1	10/28/2013 19:57	93156
Surr: Dibromofluoromethane		0	77.7-120		93.9	%REC	1	10/28/2013 19:57	93156
Surr: Toluene-d8		0	86-116		98.8	%REC	1	10/28/2013 19:57	93156



CHAIN OF CUSTODY RECORD

Client Contact		Laboratory		Project Name: <u>US Rt 20 Kane Co.</u>		COC No.: <u>1</u> of <u>3</u>	
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 No.: <u>IDOT 2013-033</u> TAT: <input checked="" type="checkbox"/> 15 BD <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> Other		Lab Job No.: <u>87110/2513</u> <u>1310278</u> Sample Temp: <u>4.4 ice</u>	
Special Instructions:		ANALYSES		Matrix Key:			
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.		VOCs SVOCs BETX & MTBE PNAs Pesticides PCBs * Total Metals SPLP/** TCLP Metals pH % Solids Waste Characterization		W: Water S: Soil SL: Sludge S: Sediment L: Leachate DW: Drinking Water OL: Oil O: Other		Comments	
Lab ID	Sample ID	Sample Date	Sample Time	Matrix			
<u>1010278-001</u>	<u>2396-11-B01</u>	<u>10/24/13</u>	<u>0740</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>002</u>	<u>2396-11-B02</u>	<u>10/24/13</u>	<u>0755</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>003</u>	<u>2396-11-B03</u>	<u>10/24/13</u>	<u>0810</u>	<u>S</u>	<u>X</u>	<u>X</u>	<u>X</u>
<i>[Handwritten signature and large diagonal line across the table]</i>							
Relinquished by:		Date/Time		Received by:		Date/Time	
<u>[Signature]</u>		<u>10/24/13 1028</u>		<u>[Signature]</u>		<u>10/24/13 10:25</u>	
Relinquished by:		Date/Time		Received by:		Date/Time	
<u>[Signature]</u>		<u>10/24/13 1200</u>		<u>[Signature]</u>		<u>10/25/13 0910</u>	
Relinquished by:		Date/Time		Received by:		Date/Time	
<u>[Signature]</u>		<u>10/24/13 1200</u>		<u>[Signature]</u>		<u>10/25/13 0910</u>	



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: FAP 525 (US Route 20) Office Phone Number, if available: _____

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

44 W 300 block of US 20

City: Unincorporated State: IL Zip Code: 60140

County: Kane Township: Hampshire

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

Latitude: 42.09797 Longitude: -88.47901
(Decimal Degrees) (-Decimal Degrees)

Identify how the lat/long data were determined:

GPS Map Interpolation Photo Interpolation Survey Other

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

II. Owner/Operator Information for Source Site

Site Owner

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4101

Contact: Sam Mead

Email, if available: Sam.Mead@illinois.gov

Site Operator

Name: Illinois Department of Transportation

Street Address: 201 West Center Court

PO Box: _____

City: Schaumburg State: IL

Zip Code: 60196-1096 Phone: 847-705-4101

Contact: Sam Mead

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: FAP 525 (US Route 20)

Latitude: 42.09797 Longitude: -88.47901

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

- a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 Ill. Adm. Code 1100.610(a):

LOCATIONS 2396-13-B01 AND 2396-13-B02 WERE SAMPLED ADJACENT TO ISGS SITE 2396V-13. SEE FIGURE 4 AND TABLE 3h OF THE REVISED PRELIMINARY SITE INVESTIGATION.

- 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 ANALYTICAL REPORT - WORK ORDER NO. 14021329

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

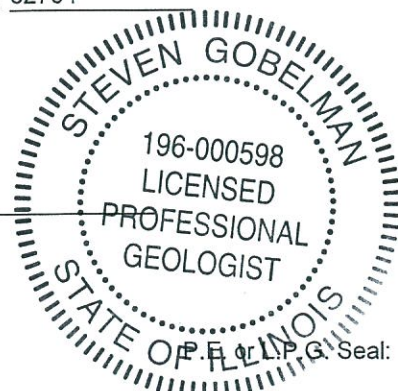
Steven Gobelman

Printed Name:


 Licensed Professional Engineer or
 Licensed Professional Geologist Signature:

8/23/14

Date:



Seal:

THIS TABLE LISTS THE PARAMETERS ANALYZED IN SITE SOIL SAMPLES

Analytical Parameters

Volatile Organic Compounds (mg/kg)
1,1,1-Trichloroethane
1,1,1,2-Tetrachloroethane
1,1,2-Trichloroethane
1,1-Dichloroethane
1,1-Dichloroethene
1,2-Dichloroethane
1,2-Dichloropropane
1,3-Dichloropropene
2-Butanone (MEK)
2-Hexanone (MBK)
4-Methyl-2-pentanone (MIBK)
Acetone
Benzene
Bromodichloromethane
Bromoform
Bromomethane
Carbon disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
Chloromethane
cis-1,2-Dichloroethene
cis-1,3-Dichloropropene
Dibromochloromethane
Ethylbenzene
Methylene chloride
Methyl-tert-butyl-ether (MTBE)
Styrene
Tetrachloroethene
Toluene
trans-1,2-Dichloroethene
trans-1,3-Dichloropropene
Trichloroethene
Vinyl Acetate
Vinyl Chloride
Xylenes, total
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 2396V-13

Vacant Lot

Sample ID	2396-13-B01-1	2396-13-B01-2	2396-13-B02-1	2396-13-B02-2	¹ Most Stringent MAC	² Outside a Populated Area MAC	³ Populated non- Metropolitan Statistical Area MAC	⁴ Within Chicago Corporate Limits MAC	⁵ Metropolitan Statistical Area MAC	⁶ Class I Soil TCLP/SPLP Comparisons Only
Sample Depth (ft)	0-5	5-9.5	0-5	5-9.5						
Sample Date	2/27/2014	2/27/2014	2/27/2014	2/27/2014						
PID	0	0	0	0						
Sample pH	7.78	8.34	7.75	8.46						
Matrix	Soil	Soil	Soil	Soil						
No Contaminants of Concern Noted.										

March 07, 2014

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



RE: IDOT2013-033

WorkOrder: 14021329

Dear Colleen Grey:

TEKLAB, INC received 4 samples on 2/28/2014 8:45:00 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
Project Manager
(618)344-1004 ex 36
SHennessy@teklabinc.com



Report Contents

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

This reporting package includes the following:

Cover Letter	1
Report Contents	2
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Case Narrative	4
Laboratory Results	5
Quality Control Results	21
Receiving Check List	45
Chain of Custody	Appended

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-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 |
| 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: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Cooler Receipt Temp: 1.4 °C

Locations and Accreditations

	<u>Collinsville</u>	<u>Springfield</u>	<u>Kansas City</u>	<u>Collinsville Air</u>
Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425	3920 Pintail Dr Springfield, IL 62711-9415	8421 Nieman Road Lenexa, KS 66214	5445 Horseshoe Lake Road 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

<u>State</u>	<u>Dept</u>	<u>Cert #</u>	<u>NELAP</u>	<u>Exp Date</u>	<u>Lab</u>
Illinois	IEPA	100226	NELAP	1/31/2015	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2014	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2014	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2014	Springfield
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2014	Collinsville
Arkansas	ADEQ	88-0966		3/14/2014	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



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-001

Client Sample ID: 2396-13-B01-1

Matrix: SOLID

Collection Date: 02/27/2014 10:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		17.8	%	1	03/03/2014 13:14	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		82.2	%	1	03/03/2014 13:14	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.78		1	03/03/2014 19:32	R187768
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		0.0476	mg/L	1	03/06/2014 18:52	96629
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0744	mg/L	1	03/04/2014 15:19	96535
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 15:19	96535
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 15:19	96535
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 15:19	96535
Chromium	NELAP	0.004	0.01	J	0.0073	mg/L	1	03/04/2014 15:19	96535
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 15:19	96535
Iron	NELAP	0.007	0.1	X	6.37	mg/L	1	03/04/2014 15:19	96535
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 15:19	96535
Manganese	NELAP	0.0016	0.005		0.0236	mg/L	1	03/04/2014 15:19	96535
Nickel	NELAP	0.0033	0.01	J	0.0041	mg/L	1	03/04/2014 15:19	96535
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 15:19	96535
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 15:19	96535
Zinc	NELAP	0.0021	0.01		0.019	mg/L	1	03/04/2014 15:19	96535
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	03/04/2014 11:36	96545
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 19:42	96545
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 14:32	96548
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.55	4.9		< 4.9	mg/Kg-dry	1	03/04/2014 19:48	96509
Arsenic	NELAP	1.23	2.45		7.88	mg/Kg-dry	1	03/04/2014 14:35	96484
Barium	NELAP	0.25	0.49		150	mg/Kg-dry	1	03/03/2014 22:07	96484
Beryllium	NELAP	0.05	0.1		0.8	mg/Kg-dry	1	03/03/2014 22:07	96484
Boron	NELAP	0.98	1.96		5.92	mg/Kg-dry	1	03/03/2014 22:07	96484
Cadmium	NELAP	0.1	0.2		0.22	mg/Kg-dry	1	03/04/2014 14:35	96484
Calcium	NELAP	2.45	4.9		3680	mg/Kg-dry	1	03/03/2014 22:07	96484
Chromium	NELAP	0.49	0.98	X	22.3	mg/Kg-dry	1	03/03/2014 22:07	96484
Cobalt	NELAP	0.49	0.98		11.8	mg/Kg-dry	1	03/03/2014 22:07	96484
Copper	NELAP	0.49	0.98		14.8	mg/Kg-dry	1	03/03/2014 22:07	96484
Iron	NELAP	0.98	1.96	X	22700	mg/Kg-dry	1	03/03/2014 22:07	96484
Lead	NELAP	1.96	3.92		13.8	mg/Kg-dry	1	03/03/2014 22:07	96484
Magnesium	NELAP	0.49	0.98		3950	mg/Kg-dry	1	03/03/2014 22:07	96484
Manganese	NELAP	0.25	0.49	X	899	mg/Kg-dry	1	03/03/2014 22:07	96484
Nickel	NELAP	0.49	0.98		23.3	mg/Kg-dry	1	03/03/2014 22:07	96484
Potassium	NELAP	4.9	9.8		1420	mg/Kg-dry	1	03/03/2014 22:07	96484
Silver	NELAP	0.49	0.54		< 0.54	mg/Kg-dry	1	03/03/2014 22:07	96484
Sodium	NELAP	2.45	4.9		255	mg/Kg-dry	1	03/03/2014 22:07	96484
Thallium	NELAP	2.45	2.55		< 2.55	mg/Kg-dry	1	03/03/2014 22:07	96484

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-001

Client Sample ID: 2396-13-B01-1

Matrix: SOLID

Collection Date: 02/27/2014 10:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.49	0.98		37.7	mg/Kg-dry	1	03/03/2014 22:07	96484
Zinc	NELAP	0.49	0.98	B	58.6	mg/Kg-dry	1	03/04/2014 14:35	96484
<i>Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.318	0.545		< 0.545	mg/Kg-dry	1	03/03/2014 8:48	96486
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.031	mg/Kg-dry	1	03/04/2014 9:29	96523
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.161	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
1,2-Dichlorobenzene	NELAP	0.193	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
1,3-Dichlorobenzene	NELAP	0.204	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
1,4-Dichlorobenzene	NELAP	0.193	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
2,4,5-Trichlorophenol	NELAP	0.115	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
2,4,6-Trichlorophenol	NELAP	0.153	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
2,4-Dichlorophenol	NELAP	0.147	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
2,4-Dimethylphenol	NELAP	0.154	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
2,4-Dinitrophenol	NELAP	0.13	1.21		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
2,4-Dinitrotoluene	NELAP	0.126	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
2,6-Dinitrotoluene	NELAP	0.131	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
2-Chloronaphthalene	NELAP	0.146	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
2-Chlorophenol	NELAP	0.154	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
2-Methylnaphthalene	NELAP	0.144	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
2-Nitroaniline	NELAP	0.11	1.21		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
2-Nitrophenol	NELAP	0.136	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
3,3'-Dichlorobenzidine	NELAP	0.243	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
3-Nitroaniline	NELAP	0.099	1.21		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
4,6-Dinitro-2-methylphenol	NELAP	0.131	1.21		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
4-Bromophenyl phenyl ether	NELAP	0.112	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
4-Chloro-3-methylphenol	NELAP	0.133	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
4-Chloroaniline	NELAP	0.147	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
4-Chlorophenyl phenyl ether	NELAP	0.12	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
4-Nitroaniline	NELAP	0.11	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
4-Nitrophenol	NELAP	0.119	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Acenaphthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Acenaphthylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Benzo(a)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Benzo(a)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 13:54	96468
Benzo(b)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 13:54	96468
Benzo(g,h,i)perylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 13:54	96468
Benzo(k)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 13:54	96468
Bis(2-chloroethoxy)methane	NELAP	0.142	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Bis(2-chloroethyl)ether	NELAP	0.172	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Bis(2-chloroisopropyl)ether	NELAP	0.138	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Bis(2-ethylhexyl)phthalate	NELAP	0.142	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Butyl benzyl phthalate	NELAP	0.122	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Carbazole		0.148	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-001

Client Sample ID: 2396-13-B01-1

Matrix: SOLID

Collection Date: 02/27/2014 10:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Dibenzo(a,h)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 13:54	96468
Dibenzofuran	NELAP	0.153	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Diethyl phthalate	NELAP	0.116	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Dimethyl phthalate	NELAP	0.11	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Di-n-butyl phthalate	NELAP	0.125	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Di-n-octyl phthalate	NELAP	0.126	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Fluorene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Hexachlorobenzene	NELAP	0.119	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Hexachlorobutadiene	NELAP	0.188	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Hexachlorocyclopentadiene	NELAP	0.124	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Hexachloroethane	NELAP	0.203	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	03/03/2014 13:54	96468
Isophorone	NELAP	0.143	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
m,p-Cresol	NELAP	0.153	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Naphthalene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Nitrobenzene	NELAP	0.152	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
N-Nitroso-di-n-propylamine	NELAP	0.133	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
N-Nitrosodiphenylamine	NELAP	0.112	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
o-Cresol	NELAP	0.143	0.606		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Pentachlorophenol	NELAP	0.8	2.43		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Phenanthrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Phenol	NELAP	0.141	0.424		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 21:19	96468
Surr: 2,4,6-Tribromophenol		0	46-125		71	%REC	1	02/28/2014 21:19	96468
Surr: 2-Fluorobiphenyl		0	49.6-91.4		57.1	%REC	1	02/28/2014 21:19	96468
Surr: 2-Fluorophenol		0	51.4-93.1	S	46.5	%REC	1	02/28/2014 21:19	96468
Surr: Nitrobenzene-d5		0	32.8-110		48.5	%REC	1	02/28/2014 21:19	96468
Surr: Phenol-d5		0	57.2-100		68.6	%REC	1	02/28/2014 21:19	96468
Surr: p-Terphenyl-d14		0	61.8-117		75.8	%REC	1	02/28/2014 21:19	96468

The Internal Standard Perylene-d12 was outside the method criteria. Subsequent analysis produced the same results. Matrix interference.

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	03/03/2014 18:58	96560
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
2-Butanone	NELAP	0.0077	0.038		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
2-Hexanone	NELAP	0.0077	0.038		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
4-Methyl-2-pentanone	NELAP	0.0077	0.038		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Acetone	NELAP	0.0077	0.038		0.05	mg/Kg-dry	1	03/03/2014 18:58	96560
Benzene	NELAP	0.0004	0.001		ND	mg/Kg-dry	1	03/03/2014 18:58	96560



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-001

Client Sample ID: 2396-13-B01-1

Matrix: SOLID

Collection Date: 02/27/2014 10:00

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Bromomethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Carbon disulfide	NELAP	0.0023	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Chloroethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Chloromethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Ethylbenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
m,p-Xylenes	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Toluene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Vinyl acetate	NELAP	0.0154	0.038		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Xylenes, Total	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 18:58	96560
Surr: 1,2-Dichloroethane-d4		0	72.2-131		110.5	%REC	1	03/03/2014 18:58	96560
Surr: 4-Bromofluorobenzene		0	82.1-116		99	%REC	1	03/03/2014 18:58	96560
Surr: Dibromofluoromethane		0	77.7-120		102	%REC	1	03/03/2014 18:58	96560
Surr: Toluene-d8		0	86-116		95.1	%REC	1	03/03/2014 18:58	96560

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-002

Client Sample ID: 2396-13-B01-2

Matrix: SOLID

Collection Date: 02/27/2014 10:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		15.9	%	1	03/03/2014 13:10	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		84.1	%	1	03/03/2014 13:10	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.34		1	03/03/2014 19:36	R187768
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		< 0.02	mg/L	1	03/06/2014 18:58	96629
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0663	mg/L	1	03/04/2014 15:23	96535
Beryllium	NELAP	0.0003	0.001		< 0.001	mg/L	1	03/04/2014 15:23	96535
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 15:23	96535
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 15:23	96535
Chromium	NELAP	0.004	0.01	J	0.0066	mg/L	1	03/04/2014 15:23	96535
Cobalt	NELAP	0.0022	0.01		< 0.01	mg/L	1	03/04/2014 15:23	96535
Iron	NELAP	0.007	0.1	X	5.48	mg/L	1	03/04/2014 15:23	96535
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 15:23	96535
Manganese	NELAP	0.0016	0.005		0.0396	mg/L	1	03/04/2014 15:23	96535
Nickel	NELAP	0.0033	0.01	J	0.0066	mg/L	1	03/04/2014 15:23	96535
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 15:23	96535
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 15:23	96535
Zinc	NELAP	0.0021	0.01		0.0182	mg/L	1	03/04/2014 15:23	96535
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	03/04/2014 11:47	96545
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 19:52	96545
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 14:35	96548
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.5	4.81		< 4.81	mg/Kg-dry	1	03/04/2014 19:52	96509
Arsenic	NELAP	1.2	2.4		4.56	mg/Kg-dry	1	03/04/2014 14:39	96484
Barium	NELAP	0.24	0.48		46.7	mg/Kg-dry	1	03/03/2014 22:11	96484
Beryllium	NELAP	0.05	0.1		0.49	mg/Kg-dry	1	03/03/2014 22:11	96484
Boron	NELAP	0.96	1.92		11.5	mg/Kg-dry	1	03/03/2014 22:11	96484
Cadmium	NELAP	0.1	0.19		< 0.19	mg/Kg-dry	1	03/04/2014 14:39	96484
Calcium	NELAP	2.4	4.81		70800	mg/Kg-dry	1	03/03/2014 22:11	96484
Chromium	NELAP	0.48	0.96	X	13.6	mg/Kg-dry	1	03/03/2014 22:11	96484
Cobalt	NELAP	0.48	0.96		5.59	mg/Kg-dry	1	03/03/2014 22:11	96484
Copper	NELAP	0.48	0.96		12.4	mg/Kg-dry	1	03/03/2014 22:11	96484
Iron	NELAP	0.96	1.92		13400	mg/Kg-dry	1	03/03/2014 22:11	96484
Lead	NELAP	1.92	3.85		5.5	mg/Kg-dry	1	03/03/2014 22:11	96484
Magnesium	NELAP	0.48	0.96		31400	mg/Kg-dry	1	03/03/2014 22:11	96484
Manganese	NELAP	0.24	0.48		320	mg/Kg-dry	1	03/03/2014 22:11	96484
Nickel	NELAP	0.48	0.96		14.4	mg/Kg-dry	1	03/03/2014 22:11	96484
Potassium	NELAP	4.81	9.62		1980	mg/Kg-dry	1	03/03/2014 22:11	96484
Silver	NELAP	0.48	0.53		< 0.53	mg/Kg-dry	1	03/03/2014 22:11	96484
Sodium	NELAP	2.4	4.81		486	mg/Kg-dry	1	03/03/2014 22:11	96484
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	03/03/2014 22:11	96484

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-002

Client Sample ID: 2396-13-B01-2

Matrix: SOLID

Collection Date: 02/27/2014 10:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.48	0.96		16.7	mg/Kg-dry	1	03/03/2014 22:11	96484
Zinc	NELAP	0.48	0.96	B	34.5	mg/Kg-dry	1	03/04/2014 14:39	96484
<i>Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.33	0.566		< 0.566	mg/Kg-dry	1	03/03/2014 8:52	96486
SW-846 7471B									
Mercury	NELAP	0.003	0.012	J	0.011	mg/Kg-dry	1	03/04/2014 9:32	96523
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.157	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
1,2-Dichlorobenzene	NELAP	0.188	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
1,3-Dichlorobenzene	NELAP	0.198	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
1,4-Dichlorobenzene	NELAP	0.188	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
2,4,5-Trichlorophenol	NELAP	0.112	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
2,4,6-Trichlorophenol	NELAP	0.149	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
2,4-Dichlorophenol	NELAP	0.143	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
2,4-Dimethylphenol	NELAP	0.15	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
2,4-Dinitrophenol	NELAP	0.126	1.18		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
2,4-Dinitrotoluene	NELAP	0.123	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
2,6-Dinitrotoluene	NELAP	0.127	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
2-Chloronaphthalene	NELAP	0.142	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
2-Chlorophenol	NELAP	0.15	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
2-Methylnaphthalene	NELAP	0.14	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
2-Nitroaniline	NELAP	0.107	1.18		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
2-Nitrophenol	NELAP	0.132	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
3,3'-Dichlorobenzidine	NELAP	0.236	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
3-Nitroaniline	NELAP	0.097	1.18		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
4,6-Dinitro-2-methylphenol	NELAP	0.127	1.18		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
4-Bromophenyl phenyl ether	NELAP	0.108	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
4-Chloro-3-methylphenol	NELAP	0.13	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
4-Chloroaniline	NELAP	0.143	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
4-Chlorophenyl phenyl ether	NELAP	0.117	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
4-Nitroaniline	NELAP	0.107	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
4-Nitrophenol	NELAP	0.116	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Acenaphthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Acenaphthylene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Anthracene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Benzo(a)anthracene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Benzo(a)pyrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Benzo(b)fluoranthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Benzo(g,h,i)perylene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Benzo(k)fluoranthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Bis(2-chloroethoxy)methane	NELAP	0.138	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Bis(2-chloroethyl)ether	NELAP	0.167	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Bis(2-chloroisopropyl)ether	NELAP	0.134	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Bis(2-ethylhexyl)phthalate	NELAP	0.138	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Butyl benzyl phthalate	NELAP	0.119	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Carbazole		0.144	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-002

Client Sample ID: 2396-13-B01-2

Matrix: SOLID

Collection Date: 02/27/2014 10:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Dibenzo(a,h)anthracene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Dibenzofuran	NELAP	0.149	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Diethyl phthalate	NELAP	0.113	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Dimethyl phthalate	NELAP	0.107	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Di-n-butyl phthalate	NELAP	0.121	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Di-n-octyl phthalate	NELAP	0.123	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Fluoranthene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Fluorene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Hexachlorobenzene	NELAP	0.116	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Hexachlorobutadiene	NELAP	0.183	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Hexachlorocyclopentadiene	NELAP	0.12	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Hexachloroethane	NELAP	0.197	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Isophorone	NELAP	0.139	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
m,p-Cresol	NELAP	0.149	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Naphthalene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Nitrobenzene	NELAP	0.147	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
N-Nitroso-di-n-propylamine	NELAP	0.13	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
N-Nitrosodiphenylamine	NELAP	0.108	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
o-Cresol	NELAP	0.139	0.59		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Pentachlorophenol	NELAP	0.778	2.36		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Phenanthrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Phenol	NELAP	0.137	0.413		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Pyrene	NELAP	0.02	0.04		ND	mg/Kg-dry	1	02/28/2014 21:53	96468
Surr: 2,4,6-Tribromophenol		0	46-125		71.9	%REC	1	02/28/2014 21:53	96468
Surr: 2-Fluorobiphenyl		0	49.6-91.4		54.7	%REC	1	02/28/2014 21:53	96468
Surr: 2-Fluorophenol		0	51.4-93.1		53	%REC	1	02/28/2014 21:53	96468
Surr: Nitrobenzene-d5		0	32.8-110		49.9	%REC	1	02/28/2014 21:53	96468
Surr: Phenol-d5		0	57.2-100		71.3	%REC	1	02/28/2014 21:53	96468
Surr: p-Terphenyl-d14		0	61.8-117		74.3	%REC	1	02/28/2014 21:53	96468
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
1,1,1,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
2-Butanone	NELAP	0.0077	0.039		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
2-Hexanone	NELAP	0.0077	0.039		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
4-Methyl-2-pentanone	NELAP	0.0077	0.039		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Acetone	NELAP	0.0077	0.039	J	0.015	mg/Kg-dry	1	03/03/2014 19:24	96560
Benzene	NELAP	0.0004	0.001		0.002	mg/Kg-dry	1	03/03/2014 19:24	96560
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-002

Client Sample ID: 2396-13-B01-2

Matrix: SOLID

Collection Date: 02/27/2014 10:10

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Carbon disulfide	NELAP	0.0023	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Chloroethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Chloromethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Ethylbenzene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	03/03/2014 19:24	96560
m,p-Xylenes	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	03/03/2014 19:24	96560
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Toluene	NELAP	0.0008	0.004	J	0.003	mg/Kg-dry	1	03/03/2014 19:24	96560
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Vinyl acetate	NELAP	0.0154	0.039		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	03/03/2014 19:24	96560
Xylenes, Total	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	03/03/2014 19:24	96560
Surr: 1,2-Dichloroethane-d4		0	72.2-131		108.6	%REC	1	03/03/2014 19:24	96560
Surr: 4-Bromofluorobenzene		0	82.1-116		96.3	%REC	1	03/03/2014 19:24	96560
Surr: Dibromofluoromethane		0	77.7-120		101	%REC	1	03/03/2014 19:24	96560
Surr: Toluene-d8		0	86-116		95.2	%REC	1	03/03/2014 19:24	96560



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-003

Client Sample ID: 2396-13-B02-1

Matrix: SOLID

Collection Date: 02/27/2014 9:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		17.4	%	1	03/03/2014 13:11	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		82.6	%	1	03/03/2014 13:11	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		7.75		1	03/03/2014 19:40	R187768
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02	J	0.01	mg/L	1	03/06/2014 19:04	96629
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.0911	mg/L	1	03/04/2014 15:27	96535
Beryllium	NELAP	0.0003	0.001	J	0.0005	mg/L	1	03/04/2014 15:27	96535
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 15:27	96535
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 15:27	96535
Chromium	NELAP	0.004	0.01		0.021	mg/L	1	03/04/2014 15:27	96535
Cobalt	NELAP	0.0022	0.01	J	0.0024	mg/L	1	03/04/2014 15:27	96535
Iron	NELAP	0.007	0.1	X	16	mg/L	1	03/04/2014 15:27	96535
Lead	NELAP	0.006	0.007		< 0.007	mg/L	1	03/04/2014 15:27	96535
Manganese	NELAP	0.0016	0.005		0.0747	mg/L	1	03/04/2014 15:27	96535
Nickel	NELAP	0.0033	0.01		0.012	mg/L	1	03/04/2014 15:27	96535
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 15:27	96535
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 15:27	96535
Zinc	NELAP	0.0021	0.01		0.039	mg/L	1	03/04/2014 15:27	96535
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	03/04/2014 11:51	96545
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 19:56	96545
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 14:41	96548
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.36	4.55		< 4.55	mg/Kg-dry	1	03/04/2014 19:55	96509
Arsenic	NELAP	1.23	2.45		7.81	mg/Kg-dry	1	03/04/2014 14:42	96484
Barium	NELAP	0.25	0.49		105	mg/Kg-dry	1	03/03/2014 22:15	96484
Beryllium	NELAP	0.05	0.1		0.73	mg/Kg-dry	1	03/03/2014 22:15	96484
Boron	NELAP	0.98	1.96		5.76	mg/Kg-dry	1	03/03/2014 22:15	96484
Cadmium	NELAP	0.1	0.2		< 0.2	mg/Kg-dry	1	03/04/2014 14:42	96484
Calcium	NELAP	2.45	4.9		2630	mg/Kg-dry	1	03/03/2014 22:15	96484
Chromium	NELAP	0.49	0.98	X	21.4	mg/Kg-dry	1	03/03/2014 22:15	96484
Cobalt	NELAP	0.49	0.98		6.98	mg/Kg-dry	1	03/03/2014 22:15	96484
Copper	NELAP	0.49	0.98		13.8	mg/Kg-dry	1	03/03/2014 22:15	96484
Iron	NELAP	0.98	1.96	X	22100	mg/Kg-dry	1	03/03/2014 22:15	96484
Lead	NELAP	1.96	3.92		8.39	mg/Kg-dry	1	03/03/2014 22:15	96484
Magnesium	NELAP	0.49	0.98		3400	mg/Kg-dry	1	03/03/2014 22:15	96484
Manganese	NELAP	0.25	0.49		413	mg/Kg-dry	1	03/03/2014 22:15	96484
Nickel	NELAP	0.49	0.98		20.5	mg/Kg-dry	1	03/03/2014 22:15	96484
Potassium	NELAP	4.9	9.8		1230	mg/Kg-dry	1	03/03/2014 22:15	96484
Silver	NELAP	0.49	0.54		< 0.54	mg/Kg-dry	1	03/03/2014 22:15	96484
Sodium	NELAP	2.45	4.9		305	mg/Kg-dry	1	03/03/2014 22:15	96484
Thallium	NELAP	2.45	2.55		< 2.55	mg/Kg-dry	1	03/03/2014 22:15	96484

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-003

Client Sample ID: 2396-13-B02-1

Matrix: SOLID

Collection Date: 02/27/2014 9:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Vanadium	NELAP	0.49	0.98		38.5	mg/Kg-dry	1	03/03/2014 22:15	96484
Zinc	NELAP	0.49	0.98	B	50.7	mg/Kg-dry	1	03/04/2014 14:42	96484
<i>Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.337	0.577		< 0.577	mg/Kg-dry	1	03/03/2014 8:55	96486
SW-846 7471B									
Mercury	NELAP	0.003	0.012		0.022	mg/Kg-dry	1	03/04/2014 9:34	96523
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.16	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
1,2-Dichlorobenzene	NELAP	0.192	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
1,3-Dichlorobenzene	NELAP	0.203	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
1,4-Dichlorobenzene	NELAP	0.192	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
2,4,5-Trichlorophenol	NELAP	0.115	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
2,4,6-Trichlorophenol	NELAP	0.152	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
2,4-Dichlorophenol	NELAP	0.146	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
2,4-Dimethylphenol	NELAP	0.153	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
2,4-Dinitrophenol	NELAP	0.129	1.21		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
2,4-Dinitrotoluene	NELAP	0.125	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
2,6-Dinitrotoluene	NELAP	0.13	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
2-Chloronaphthalene	NELAP	0.145	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
2-Chlorophenol	NELAP	0.153	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
2-Methylnaphthalene	NELAP	0.144	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
2-Nitroaniline	NELAP	0.11	1.21		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
2-Nitrophenol	NELAP	0.135	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
3,3'-Dichlorobenzidine	NELAP	0.241	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
3-Nitroaniline	NELAP	0.099	1.21		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
4,6-Dinitro-2-methylphenol	NELAP	0.13	1.21		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
4-Bromophenyl phenyl ether	NELAP	0.111	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
4-Chloro-3-methylphenol	NELAP	0.133	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
4-Chloroaniline	NELAP	0.146	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
4-Chlorophenyl phenyl ether	NELAP	0.119	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
4-Nitroaniline	NELAP	0.11	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
4-Nitrophenol	NELAP	0.118	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Acenaphthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Acenaphthylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Benzo(a)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Benzo(a)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Benzo(b)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Benzo(g,h,i)perylene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Benzo(k)fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Bis(2-chloroethoxy)methane	NELAP	0.141	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Bis(2-chloroethyl)ether	NELAP	0.171	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Bis(2-chloroisopropyl)ether	NELAP	0.138	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Bis(2-ethylhexyl)phthalate	NELAP	0.141	0.422		0.703	mg/Kg-dry	1	02/28/2014 22:27	96468
Butyl benzyl phthalate	NELAP	0.122	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Carbazole		0.147	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-003

Client Sample ID: 2396-13-B02-1

Matrix: SOLID

Collection Date: 02/27/2014 9:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Chrysene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Dibenzo(a,h)anthracene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Dibenzofuran	NELAP	0.152	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Diethyl phthalate	NELAP	0.116	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Dimethyl phthalate	NELAP	0.11	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Di-n-butyl phthalate	NELAP	0.124	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Di-n-octyl phthalate	NELAP	0.125	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Fluoranthene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Fluorene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Hexachlorobenzene	NELAP	0.118	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Hexachlorobutadiene	NELAP	0.187	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Hexachlorocyclopentadiene	NELAP	0.123	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Hexachloroethane	NELAP	0.201	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Indeno(1,2,3-cd)pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Isophorone	NELAP	0.142	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
m,p-Cresol	NELAP	0.152	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Naphthalene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Nitrobenzene	NELAP	0.151	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
N-Nitroso-di-n-propylamine	NELAP	0.133	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
N-Nitrosodiphenylamine	NELAP	0.111	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
o-Cresol	NELAP	0.142	0.603		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Pentachlorophenol	NELAP	0.796	2.41		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Phenanthrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Phenol	NELAP	0.14	0.422		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Pyrene	NELAP	0.02	0.041		ND	mg/Kg-dry	1	02/28/2014 22:27	96468
Surr: 2,4,6-Tribromophenol		0	46-125		70.5	%REC	1	02/28/2014 22:27	96468
Surr: 2-Fluorobiphenyl		0	49.6-91.4		57.1	%REC	1	02/28/2014 22:27	96468
Surr: 2-Fluorophenol		0	51.4-93.1		52.3	%REC	1	02/28/2014 22:27	96468
Surr: Nitrobenzene-d5		0	32.8-110		51	%REC	1	02/28/2014 22:27	96468
Surr: Phenol-d5		0	57.2-100		72.7	%REC	1	02/28/2014 22:27	96468
Surr: p-Terphenyl-d14		0	61.8-117		75.7	%REC	1	02/28/2014 22:27	96468
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
1,1,1,2-Tetrachloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
1,1,2-Trichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
1,1-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
1,1-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
1,2-Dichloroethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
1,2-Dichloropropane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
1,3-Dichloropropene, Total		0.001	0.004		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
2-Butanone	NELAP	0.0098	0.049		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
2-Hexanone	NELAP	0.0098	0.049		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
4-Methyl-2-pentanone	NELAP	0.0098	0.049		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Acetone	NELAP	0.0098	0.049	J	0.02	mg/Kg-dry	1	03/03/2014 18:06	96560
Benzene	NELAP	0.0005	0.001		0.008	mg/Kg-dry	1	03/03/2014 18:06	96560
Bromodichloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Bromoform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-003

Client Sample ID: 2396-13-B02-1

Matrix: SOLID

Collection Date: 02/27/2014 9:45

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Bromomethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Carbon disulfide	NELAP	0.0029	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Carbon tetrachloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Chlorobenzene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Chloroethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Chloroform	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Chloromethane	NELAP	0.002	0.01		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
cis-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
cis-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Dibromochloromethane	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Ethylbenzene	NELAP	0.001	0.005	J	0.004	mg/Kg-dry	1	03/03/2014 18:06	96560
m,p-Xylenes	NELAP	0.001	0.005		0.009	mg/Kg-dry	1	03/03/2014 18:06	96560
Methyl tert-butyl ether	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Methylene chloride	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
o-Xylene	NELAP	0.001	0.005	J	0.004	mg/Kg-dry	1	03/03/2014 18:06	96560
Styrene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Tetrachloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Toluene	NELAP	0.001	0.005		0.016	mg/Kg-dry	1	03/03/2014 18:06	96560
trans-1,2-Dichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
trans-1,3-Dichloropropene	NELAP	0.001	0.004		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Trichloroethene	NELAP	0.001	0.005		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Vinyl acetate	NELAP	0.0195	0.049		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Vinyl chloride	NELAP	0.0005	0.002		ND	mg/Kg-dry	1	03/03/2014 18:06	96560
Xylenes, Total	NELAP	0.001	0.005		0.013	mg/Kg-dry	1	03/03/2014 18:06	96560
Surr: 1,2-Dichloroethane-d4		0	72.2-131		109.1	%REC	1	03/03/2014 18:06	96560
Surr: 4-Bromofluorobenzene		0	82.1-116		97.2	%REC	1	03/03/2014 18:06	96560
Surr: Dibromofluoromethane		0	77.7-120		100.9	%REC	1	03/03/2014 18:06	96560
Surr: Toluene-d8		0	86-116		95	%REC	1	03/03/2014 18:06	96560

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-004

Client Sample ID: 2396-13-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 9:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA SW846 3550C, 5035A, ASTM D2974									
Percent Moisture		0.1	0.1		10.5	%	1	03/03/2014 13:14	R187784
STANDARD METHODS 2540 G									
Total Solids		0.1	0.1		89.5	%	1	03/03/2014 13:14	R187784
SW-846 9045C									
pH (1:1)	NELAP	0	1		8.46		1	03/03/2014 19:42	R187768
SW-846 1311, 3010A, 6010B, METALS IN TCLP EXTRACT BY ICP									
Iron	NELAP	0.007	0.02		0.0498	mg/L	1	03/06/2014 16:04	96628
Manganese	NELAP	0.0016	0.005		3.76	mg/L	1	03/06/2014 16:04	96628
SW-846 1312, 3005A, 6010B, METALS IN SPLP EXTRACT BY ICP									
Barium	NELAP	0.02	0.05		0.134	mg/L	1	03/04/2014 15:30	96535
Beryllium	NELAP	0.0003	0.001	J	0.0009	mg/L	1	03/04/2014 15:30	96535
Boron	NELAP	1	2		< 2	mg/L	1	03/04/2014 15:30	96535
Cadmium	NELAP	0.0003	0.002		< 0.002	mg/L	1	03/04/2014 15:30	96535
Chromium	NELAP	0.004	0.01		0.0233	mg/L	1	03/04/2014 15:30	96535
Cobalt	NELAP	0.0022	0.01	J	0.0062	mg/L	1	03/04/2014 15:30	96535
Iron	NELAP	0.007	0.1	X	21.4	mg/L	1	03/04/2014 15:30	96535
Lead	NELAP	0.006	0.007		0.0073	mg/L	1	03/04/2014 15:30	96535
Manganese	NELAP	0.0016	0.005	X	0.16	mg/L	1	03/04/2014 15:30	96535
Nickel	NELAP	0.0033	0.01		0.0212	mg/L	1	03/04/2014 15:30	96535
Selenium	NELAP	0.022	0.05		< 0.05	mg/L	1	03/04/2014 15:30	96535
Silver	NELAP	0.003	0.01		< 0.01	mg/L	1	03/04/2014 15:30	96535
Zinc	NELAP	0.0021	0.01		0.0541	mg/L	1	03/04/2014 15:30	96535
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	03/04/2014 12:13	96545
Thallium, SPLP by GFAA	NELAP	0.0005	0.002		< 0.002	mg/L	1	03/04/2014 19:59	96545
SW-846 1312, 7470A IN SPLP EXTRACT									
Mercury	NELAP	0.00005	0.0002		< 0.0002	mg/L	1	03/04/2014 14:44	96548
SW-846 3050B, 6010B, METALS BY ICP									
Antimony	NELAP	2.36	4.55		< 4.55	mg/Kg-dry	1	03/04/2014 19:59	96509
Arsenic	NELAP	1.2	2.4		3.85	mg/Kg-dry	1	03/04/2014 14:46	96484
Barium	NELAP	0.24	0.48		37.8	mg/Kg-dry	1	03/03/2014 22:18	96484
Beryllium	NELAP	0.05	0.1		0.44	mg/Kg-dry	1	03/03/2014 22:18	96484
Boron	NELAP	0.96	1.92		10.5	mg/Kg-dry	1	03/03/2014 22:18	96484
Cadmium	NELAP	0.1	0.19		< 0.19	mg/Kg-dry	1	03/04/2014 14:46	96484
Calcium	NELAP	2.4	4.81		69900	mg/Kg-dry	1	03/03/2014 22:18	96484
Chromium	NELAP	0.48	0.96		12	mg/Kg-dry	1	03/03/2014 22:18	96484
Cobalt	NELAP	0.48	0.96		4.87	mg/Kg-dry	1	03/03/2014 22:18	96484
Copper	NELAP	0.48	0.96		11.6	mg/Kg-dry	1	03/03/2014 22:18	96484
Iron	NELAP	0.96	1.92		12300	mg/Kg-dry	1	03/03/2014 22:18	96484
Lead	NELAP	1.92	3.85		4.47	mg/Kg-dry	1	03/03/2014 22:18	96484
Magnesium	NELAP	0.48	0.96		30600	mg/Kg-dry	1	03/03/2014 22:18	96484
Manganese	NELAP	0.24	0.48		312	mg/Kg-dry	1	03/03/2014 22:18	96484
Nickel	NELAP	0.48	0.96		13	mg/Kg-dry	1	03/03/2014 22:18	96484
Potassium	NELAP	4.81	9.62		1760	mg/Kg-dry	1	03/03/2014 22:18	96484
Silver	NELAP	0.48	0.53		< 0.53	mg/Kg-dry	1	03/03/2014 22:18	96484
Sodium	NELAP	2.4	4.81		341	mg/Kg-dry	1	03/03/2014 22:18	96484

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-004

Client Sample ID: 2396-13-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 9:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3050B, 6010B, METALS BY ICP									
Thallium	NELAP	2.4	2.5		< 2.5	mg/Kg-dry	1	03/03/2014 22:18	96484
Vanadium	NELAP	0.48	0.96		15.2	mg/Kg-dry	1	03/03/2014 22:18	96484
Zinc	NELAP	0.48	0.96	B	31.1	mg/Kg-dry	1	03/04/2014 14:46	96484
<i>Sample result for Zn exceeds 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).</i>									
SW-846 3050B, 7010 METALS BY GFAA									
Selenium	NELAP	0.33	0.566		< 0.566	mg/Kg-dry	1	03/03/2014 8:59	96486
SW-846 7471B									
Mercury	NELAP	0.003	0.011	J	0.01	mg/Kg-dry	1	03/05/2014 10:24	96591
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,2,4-Trichlorobenzene	NELAP	0.147	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
1,2-Dichlorobenzene	NELAP	0.176	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
1,3-Dichlorobenzene	NELAP	0.186	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
1,4-Dichlorobenzene	NELAP	0.176	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
2,4,5-Trichlorophenol	NELAP	0.105	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
2,4,6-Trichlorophenol	NELAP	0.14	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
2,4-Dichlorophenol	NELAP	0.134	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
2,4-Dimethylphenol	NELAP	0.141	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
2,4-Dinitrophenol	NELAP	0.119	1.11		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
2,4-Dinitrotoluene	NELAP	0.115	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
2,6-Dinitrotoluene	NELAP	0.12	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
2-Chloronaphthalene	NELAP	0.133	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
2-Chlorophenol	NELAP	0.141	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
2-Methylnaphthalene	NELAP	0.132	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
2-Nitroaniline	NELAP	0.101	1.11		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
2-Nitrophenol	NELAP	0.124	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
3,3'-Dichlorobenzidine	NELAP	0.222	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
3-Nitroaniline	NELAP	0.091	1.11		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
4,6-Dinitro-2-methylphenol	NELAP	0.12	1.11		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
4-Bromophenyl phenyl ether	NELAP	0.102	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
4-Chloro-3-methylphenol	NELAP	0.122	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
4-Chloroaniline	NELAP	0.134	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
4-Chlorophenyl phenyl ether	NELAP	0.11	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
4-Nitroaniline	NELAP	0.101	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
4-Nitrophenol	NELAP	0.109	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Acenaphthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Acenaphthylene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Anthracene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Benzo(a)anthracene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Benzo(a)pyrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Benzo(b)fluoranthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Benzo(g,h,i)perylene	NELAP	0.018	0.038	SR	ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Benzo(k)fluoranthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Bis(2-chloroethoxy)methane	NELAP	0.13	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Bis(2-chloroethyl)ether	NELAP	0.157	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Bis(2-chloroisopropyl)ether	NELAP	0.126	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Bis(2-ethylhexyl)phthalate	NELAP	0.13	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Butyl benzyl phthalate	NELAP	0.112	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-004

Client Sample ID: 2396-13-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 9:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 3550B, 8270C, SEMI-VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Carbazole		0.135	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Chrysene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Dibenzo(a,h)anthracene	NELAP	0.018	0.038	SR	ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Dibenzofuran	NELAP	0.14	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Diethyl phthalate	NELAP	0.106	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Dimethyl phthalate	NELAP	0.101	0.388	SR	ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Di-n-butyl phthalate	NELAP	0.114	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Di-n-octyl phthalate	NELAP	0.115	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Fluoranthene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Fluorene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Hexachlorobenzene	NELAP	0.109	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Hexachlorobutadiene	NELAP	0.172	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Hexachlorocyclopentadiene	NELAP	0.113	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Hexachloroethane	NELAP	0.185	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Indeno(1,2,3-cd)pyrene	NELAP	0.018	0.038	SR	ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Isophorone	NELAP	0.131	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
m,p-Cresol	NELAP	0.14	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Naphthalene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Nitrobenzene	NELAP	0.139	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
N-Nitroso-di-n-propylamine	NELAP	0.122	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
N-Nitrosodiphenylamine	NELAP	0.102	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
o-Cresol	NELAP	0.131	0.554		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Pentachlorophenol	NELAP	0.732	2.22		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Phenanthrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Phenol	NELAP	0.129	0.388		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Pyrene	NELAP	0.018	0.038		ND	mg/Kg-dry	1	02/28/2014 23:00	96468
Surr: 2,4,6-Tribromophenol		0	46-125		67.3	%REC	1	02/28/2014 23:00	96468
Surr: 2-Fluorobiphenyl		0	49.6-91.4	S	38.5	%REC	1	02/28/2014 23:00	96468
Surr: 2-Fluorophenol		0	51.4-93.1	S	45.7	%REC	1	02/28/2014 23:00	96468
Surr: Nitrobenzene-d5		0	32.8-110		42.9	%REC	1	02/28/2014 23:00	96468
Surr: Phenol-d5		0	57.2-100		66.6	%REC	1	02/28/2014 23:00	96468
Surr: p-Terphenyl-d14		0	61.8-117		71.5	%REC	1	02/28/2014 23:00	96468

Surrogate recovery is outside QC limits due to matrix interference.

RPD, MS and MSD recovery did not recover within control limits due to sample composition.

SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
1,1,1-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
1,1,2,2-Tetrachloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
1,1,2-Trichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
1,1-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
1,1-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
1,2-Dichloroethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
1,2-Dichloropropane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
1,3-Dichloropropene, Total		0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
2-Butanone	NELAP	0.0076	0.038		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
2-Hexanone	NELAP	0.0076	0.038		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
4-Methyl-2-pentanone	NELAP	0.0076	0.038		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Acetone	NELAP	0.0076	0.038	J	0.02	mg/Kg-dry	1	03/03/2014 10:18	96560



Laboratory Results

<http://www.teklabinc.com/>

Client: Andrews Engineering, Inc.

Work Order: 14021329

Client Project: IDOT2013-033

Report Date: 07-Mar-14

Lab ID: 14021329-004

Client Sample ID: 2396-13-B02-2

Matrix: SOLID

Collection Date: 02/27/2014 9:50

Analyses	Certification	MDL	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5035, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS									
Benzene	NELAP	0.0004	0.001		0.003	mg/Kg-dry	1	03/03/2014 10:18	96560
Bromodichloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Bromoform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Bromomethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Carbon disulfide	NELAP	0.0023	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Carbon tetrachloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Chlorobenzene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Chloroethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Chloroform	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Chloromethane	NELAP	0.0015	0.008		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
cis-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
cis-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Dibromochloromethane	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Ethylbenzene	NELAP	0.0008	0.004	J	0.001	mg/Kg-dry	1	03/03/2014 10:18	96560
m,p-Xylenes	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	03/03/2014 10:18	96560
Methyl tert-butyl ether	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Methylene chloride	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
o-Xylene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Styrene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Tetrachloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Toluene	NELAP	0.0008	0.004		0.004	mg/Kg-dry	1	03/03/2014 10:18	96560
trans-1,2-Dichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
trans-1,3-Dichloropropene	NELAP	0.0008	0.003		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Trichloroethene	NELAP	0.0008	0.004		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Vinyl acetate	NELAP	0.0151	0.038		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Vinyl chloride	NELAP	0.0004	0.002		ND	mg/Kg-dry	1	03/03/2014 10:18	96560
Xylenes, Total	NELAP	0.0008	0.004	J	0.002	mg/Kg-dry	1	03/03/2014 10:18	96560
Surr: 1,2-Dichloroethane-d4		0	72.2-131		108	%REC	1	03/03/2014 10:18	96560
Surr: 4-Bromofluorobenzene		0	82.1-116		101.2	%REC	1	03/03/2014 10:18	96560
Surr: Dibromofluoromethane		0	77.7-120		101.5	%REC	1	03/03/2014 10:18	96560
Surr: Toluene-d8		0	86-116		95.4	%REC	1	03/03/2014 10:18	96560

