



**CONESTOGA-ROVERS
& ASSOCIATES**

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December 8, 2014

Reference No. 086111

Mr. Shawn C. Crosbie
Environmental Analyst
The United Illuminating Company
180 Marsh Hill Road
Orange, CT 06477

Dear Mr. Crosbie:

Re: Phase II Environmental Site Assessment
Hawthorne Drive Substation
Fairfield, Connecticut (Site)

1.0 Introduction

As requested by The United Illuminating Company (UI), Conestoga-Rovers & Associates (CRA) is pleased to provide this summary of the recent Phase II Environmental Site Assessment (ESA) conducted at the Hawthorne Drive Substation located in Fairfield, Connecticut (Site).

2.0 Scope of Work

The Phase II ESA activities were conducted on October 27, 2014, and included soil excavation and soil sample collection. The following paragraphs provide a summary of the Phase II field activities. A simplified Site plan showing test pit sample locations is included as Figure 1.

Five test pits were excavated by Cisco, LLC (Cisco) using a compact excavator. The proposed scope of work included the installation of one temporary monitoring well which was attempted at TP-1. However, no groundwater was encountered to a maximum excavation depth of 13.2 feet below ground surface (bgs). As such, neither the temporary well was installed nor was a groundwater sample collected.

Two test pits (TP-2 and TP-3) were excavated to a depth of 5 feet bgs, TP-4 was excavated to 4 feet bgs due to refusal, and TP-5 was excavated inside the substation to a depth of 3 feet bgs. Soils were logged in general accordance with the Unified Soil Classification System (USCS) and screened in the field using a photoionization detector (PID). Soils encountered consisted of loose, dry, brown silty sand with some gravel to a depth of approximately 8 feet bgs, and sandy silty clay with numerous large boulders (up to 3 feet in diameter) to a maximum explored depth of 13.2 feet bgs.

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One soil sample was collected from each test pit at the depths identified in Table 1. All soil samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), Extractable Total Petroleum Hydrocarbons (ETPH), total Polychlorinated Biphenyls (PCBs), Total and Synthetic Precipitation Leaching Procedure (SPLP) Resource Conservation and Recovery Act (RCRA) 8 metals, reactive cyanide, reactive sulfide, pH, conductivity, and flashpoint. In addition, one sample was analyzed for herbicides and pesticides.

The five collected soil samples were labeled using a Site unique numbering system, placed on ice, and shipped via overnight courier to Con-Test Laboratories under standard chain of custody procedures with a standard turn-around time.

3.0 Data Evaluation

The soil analytical data resulting from the pre-characterization was evaluated to determine how the material would need to be managed. Pursuant to Connecticut Department of Energy and Environmental Protection (CTDEEP) policy on the management of contaminated environmental media, the soil analytical data was evaluated relative to the criteria identified in Connecticut Remediation Standard Regulations 22a-133k-1 through 22a-133k-3 (RSRs). The laboratory analytical report is included in Attachment A.

The soil analytical data was evaluated relative to direct exposure criteria for Industrial/Commercial sites (DEC I/C) and residential sites (DEC Res) and pollutant mobility criteria for areas classified as GA (GA PMC). A summary of detected results is provided in Table 1. Note that although the Site is located in a GB groundwater classification area, the soil results were evaluated relative to GA for purposes of determining an unrestricted use scenario.

As indicated in Table 1, all constituents in soil were detected below RSR criteria.

4.0 Management Options

Based on the analytical results, the soil at the Site is NOT classified as hazardous waste as it is neither characteristically hazardous nor listed as hazardous waste. As such, it is not subject to Connecticut Hazardous Waste Management Regulations, but is potentially subject to certain management requirements under Connecticut General Statutes (CGS) Section 22a-454 and Regulations of State Agencies (RCSA) Section 22a-209 as discussed below.

Although below RSR criteria, the soil collected from test pits TP-2, TP-3, and TP-4 was potentially affected by a release and is considered contaminated environmental media due to detected



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constituents. Upon excavation, the soil is subject to waste management regulations. This soil can be re-used on Site or on another site approved by the Commissioner.

The soil in the vicinity of test pits TP-1 and TP-5 indicates non-detectable concentrations of constituents, with the exception of naturally occurring metals (barium, cadmium, chromium, lead). This soil can be considered natural soil pursuant to RCSA 22a-209.

Please contact Jeff Lambert at (860) 747-1800 if you have any questions or comments.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

Jeff Lambert, LEP, LSP, P.E.

TOF-3-B

TABLE 1

SOIL ANALYTICAL RESULTS SUMMARY
HAWTHORNE SUBSTATION
FAIRFIELD, CONNECTICUT

<i>Sample Location:</i>	<i>DEC</i>	<i>DEC</i>	<i>GA</i>	<i>TP-1</i>	<i>TP-2</i>	<i>TP-3</i>	<i>TP-4</i>	<i>TP-5</i>
<i>Sample Depth:</i>	<i>Res</i>	<i>IC</i>	<i>PMC</i>	<i>(3-5) ft BGS</i>	<i>(4-5) ft BGS</i>	<i>(3-5) ft BGS</i>	<i>(3-4) ft BGS</i>	<i>(2-3) ft BGS</i>
<i>Sample ID:</i>				<i>SO-86111-102714-AB-001</i>	<i>SO-86111-102714-AB-002</i>	<i>SO-86111-102714-AB-003</i>	<i>SO-86111-102714-AB-004</i>	<i>SO-86111-102714-AB-005</i>
<i>Sample Date:</i>				<i>10/27/2014</i>	<i>10/27/2014</i>	<i>10/27/2014</i>	<i>10/27/2014</i>	<i>10/27/2014</i>
<i>Parameters</i>	<i>Units</i>	<i>a</i>	<i>b</i>	<i>c</i>				
<i>VOCs</i>								
1,1,1,2-Tetrachloroethane	mg/kg	24	220	0.02	0.0023 U	0.0022 U	0.0022 U	0.0020 U
1,1,1-Trichloroethane	mg/kg	500	1000	4	0.0023 U	0.0022 U	0.0022 U	0.0020 U
1,1,2,2-Tetrachloroethane	mg/kg	3.1	29	0.01	0.0011 U	0.0011 U	0.0011 U	0.00099 U
1,1,2-Trichloroethane	mg/kg	11	100	0.1	0.0023 U	0.0022 U	0.0022 U	0.0020 U
1,1-Dichloroethane	mg/kg	500	1000	1.4	0.0023 U	0.0022 U	0.0022 U	0.0020 U
1,1-Dichloroethene	mg/kg	1	9.5	0.14	0.0045 U	0.0045 U	0.0044 U	0.0040 U
1,1-Dichloropropene	mg/kg				0.0023 U	0.0022 U	0.0022 U	0.0020 U
1,2,3-Trichlorobenzene	mg/kg				0.0023 U	0.0022 U	0.0022 U	0.0020 U
1,2,3-Trichloropropane	mg/kg				0.0023 U	0.0022 U	0.0022 U	0.0020 U
1,2,4-Trichlorobenzene	mg/kg	680	2500	1.4	0.0023 U	0.0022 U	0.0022 U	0.0020 U
1,2,4-Trimethylbenzene	mg/kg	500	1000	7	0.0023 U	0.0022 U	0.0022 U	0.0020 U
1,2-Dibromo-3-chloropropane (DBCP)	mg/kg	0.44	4.1		0.0023 U	0.0022 U	0.0022 U	0.0020 U
1,2-Dibromoethane (Ethylene dibromide)	mg/kg	0.007	0.067	0.01	0.0011 U	0.0011 U	0.0011 U	0.00099 U
1,2-Dichlorobenzene	mg/kg	500	1000	3.1	0.0023 U	0.0022 U	0.0022 U	0.0020 U
1,2-Dichloroethane	mg/kg	6.7	63	0.02	0.0023 U	0.0022 U	0.0022 U	0.0020 U
1,2-Dichloropropane	mg/kg	9	84	0.1	0.0023 U	0.0022 U	0.0022 U	0.0020 U
1,3,5-Trimethylbenzene	mg/kg	500	1000	7	0.0023 U	0.0022 U	0.0022 U	0.0020 U
1,3-Dichlorobenzene	mg/kg	500	1000	12	0.0023 U	0.0022 U	0.0022 U	0.0020 U
1,3-Dichloropropane	mg/kg				0.0011 U	0.0011 U	0.0011 U	0.00099 U
1,4-Dichlorobenzene	mg/kg	26	240	1.5	0.0023 U	0.0022 U	0.0022 U	0.0020 U
2,2-Dichloropropane	mg/kg				0.0023 U	0.0022 U	0.0022 U	0.0020 U
2-Butanone (Methyl ethyl ketone) (MEK)	mg/kg	500	1000	8	0.045 U	0.045 U	0.044 U	0.040 U
2-Chlorotoluene	mg/kg	500	1000		0.0023 U	0.0022 U	0.0022 U	0.0020 U
2-Hexanone	mg/kg				0.023 U	0.022 U	0.022 U	0.020 U
2-Phenylbutane (sec-Butylbenzene)	mg/kg	500	1000		0.0023 U	0.0022 U	0.0022 U	0.0020 U
4-Chlorotoluene	mg/kg	500	1000		0.0023 U	0.0022 U	0.0022 U	0.0020 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	mg/kg	500	1000	7	0.023 U	0.022 U	0.022 U	0.020 U
Acetone	mg/kg	500	1000	14	0.11 U	0.11 U	0.11 U	0.099 U
Acrylonitrile	mg/kg	1.1	11	0.01	0.0068 U	0.0067 U	0.0066 U	0.0059 U
Benzene	mg/kg	21	200	0.02	0.0023 U	0.0022 U	0.0022 U	0.0020 U
Bromobenzene	mg/kg				0.0023 U	0.0022 U	0.0022 U	0.0020 U
Bromodichloromethane	mg/kg	9.9	92	0.011	0.0023 U	0.0022 U	0.0022 U	0.0020 U
Bromoform	mg/kg	78	720	0.08	0.0023 U	0.0022 U	0.0022 U	0.0020 U
Bromomethane (Methyl bromide)	mg/kg	95	1000	0.2	0.011 U	0.011 U	0.011 U	0.0099 U
Carbon disulfide	mg/kg	500	1000	14	0.0068 U	0.0067 U	0.0066 U	0.0059 U
Carbon tetrachloride	mg/kg	4.7	44	0.1	0.0023 U	0.0022 U	0.0022 U	0.0020 U
Chlorobenzene	mg/kg	500	1000	2	0.0023 U	0.0022 U	0.0022 U	0.0020 U
Chloroethane	mg/kg				0.023 U	0.022 U	0.022 U	0.020 U
Chloroform (Trichloromethane)	mg/kg	100	940	0.12	0.0045 U	0.0045 U	0.0044 U	0.0040 U
Chloromethane (Methyl chloride)	mg/kg	47	440	0.054	0.011 U	0.011 U	0.011 U	0.0099 U
cis-1,2-Dichloroethene	mg/kg	500	1000	1.4	0.0023 U	0.0022 U	0.0022 U	0.0020 U
cis-1,3-Dichloropropene	mg/kg	3.4	32	0.01	0.0011 U	0.0011 U	0.0011 U	0.00099 U
Cymene (p-Isopropyltoluene)	mg/kg				0.0023 U	0.0022 U	0.0022 U	0.0020 U
Dibromochloromethane	mg/kg	7.3	68	0.01	0.0011 U	0.0011 U	0.0011 U	0.00099 U
Dibromomethane	mg/kg				0.0023 U	0.0022 U	0.0022 U	0.0020 U
Dichlorodifluoromethane (CFC-12)	mg/kg				0.023 U	0.022 U	0.022 U	0.020 U
Ethylbenzene	mg/kg	500	1000	10.1	0.0023 U	0.0022 U	0.0022 U	0.0020 U
Hexachlorobutadiene	mg/kg	7.9	73	1	0.0023 U	0.0022 U	0.0022 U	0.0020 U
Isopropyl benzene	mg/kg	500	1000	0.6	0.0023 U	0.0022 U	0.0022 U	0.0020 U
m&p-Xylenes	mg/kg				0.0045 U	0.0045 U	0.0044 U	0.0040 U
Methyl tert butyl ether (MTBE)	mg/kg	500	1000	2	0.0045 U	0.0045 U	0.0044 U	0.0040 U
Methylene chloride	mg/kg	82	760	0.1	0.023 U	0.022 U	0.022 U	0.020 U
Naphthalene	mg/kg	1000	2500	5.6	0.0045 U	0.0045 U	0.0044 U	0.0040 U
N-Butylbenzene	mg/kg	500	1000	1.4	0.0023 U	0.0022 U	0.0022 U	0.0020 U

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<i>Sample Depth:</i>		<i>Res</i>	<i>IC</i>	<i>PMC</i>	<i>(3-5) ft BGS</i>	<i>(4-5) ft BGS</i>	<i>(3-5) ft BGS</i>	<i>(3-4) ft BGS</i>	<i>(2-3) ft BGS</i>
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<i>Parameters</i>	<i>Units</i>	<i>a</i>	<i>b</i>	<i>c</i>					
N-Propylbenzene	mg/kg	500	1000	1.4	0.0045 U	0.0045 U	0.0044 U	0.0043 U	0.0040 U
o-Xylene	mg/kg				0.0023 U	0.0022 U	0.0022 U	0.0022 U	0.0020 U
Styrene	mg/kg	500	1000	2	0.0023 U	0.0022 U	0.0022 U	0.0022 U	0.0020 U
tert-Butylbenzene	mg/kg	500	1000	1.4	0.0023 U	0.0022 U	0.0022 U	0.0022 U	0.0020 U
Tetrachloroethene	mg/kg	12	110	0.1	0.0023 U	0.0022 U	0.0022 U	0.0022 U	0.0020 U
Tetrahydrofuran	mg/kg				0.011 U	0.011 U	0.011 U	0.011 U	0.0099 U
Toluene	mg/kg	500	1000	20	0.0023 U	0.0022 U	0.0022 U	0.0022 U	0.0020 U
trans-1,2-Dichloroethene	mg/kg	500	1000	2	0.0023 U	0.0022 U	0.0022 U	0.0022 U	0.0020 U
trans-1,3-Dichloropropene	mg/kg	3.4	32	0.01	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.00099 U
trans-1,4-Dichloro-2-butene	mg/kg				0.0045 U	0.0045 U	0.0044 U	0.0043 U	0.0040 U
Trichloroethene	mg/kg	56	520	0.1	0.0023 U	0.0022 U	0.0022 U	0.0022 U	0.0020 U
Trichlorofluoromethane (CFC-11)	mg/kg	500	1000	26	0.011 U	0.011 U	0.011 U	0.011 U	0.0099 U
Trifluorotrichloroethane (Freon 113)	mg/kg				0.011 U	0.011 U	0.011 U	0.011 U	0.0099 U
Vinyl chloride	mg/kg	0.32	3	0.04	0.011 U	0.011 U	0.011 U	0.011 U	0.0099 U
<i>SVOCs</i>									
1,2,4,5-Tetrachlorobenzene	mg/kg	20			0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
1,2,4-Trichlorobenzene	mg/kg	680	2500	1.4	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
2,2'-Oxybis(2-chloropropane) (bis(2-Chloroisopropyl) ether)	mg/kg				0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
2,4,5-Trichlorophenol	mg/kg	1000	2500	14	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
2,4,6-Trichlorophenol	mg/kg	56	520	1	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
2,4-Dichlorophenol	mg/kg	203			0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
2,4-Dimethylphenol	mg/kg	1000	2500	2.8	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
2,4-Dinitrophenol	mg/kg	140	2500	1.65	0.79 U	0.74 U	0.72 U	0.74 U	0.74 U
2,4-Dinitrotoluene	mg/kg	140	2500	1	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
2,6-Dinitrotoluene	mg/kg	68	2000	1	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
2-Chloronaphthalene	mg/kg	1000	2500	11	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
2-Chlorophenol	mg/kg	339	2500	1	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
2-Methylnaphthalene	mg/kg	474	2500	0.98	0.20 U	0.19 U	0.18 U	0.19 U	0.19 U
2-Methylphenol	mg/kg	1000	2500	7	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
2-Nitroaniline	mg/kg	4.1	1200	1.65	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
2-Nitrophenol	mg/kg	540	2500	1.1	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
3&4-Methylphenol	mg/kg	340	2500	0.7	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
3,3'-Dichlorobenzidine	mg/kg	1.4	13	0.33	0.20 U	0.19 U	0.18 U	0.19 U	0.19 U
3-Nitroaniline	mg/kg	200	2500	1.65	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
4,6-Dinitro-2-methylphenol	mg/kg				0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
4-Bromophenyl phenyl ether	mg/kg	500	1000	8.2	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
4-Chloro-3-methylphenol	mg/kg				0.79 U	0.74 U	0.72 U	0.74 U	0.74 U
4-Chloroaniline	mg/kg	270	2500	1	0.79 U	0.74 U	0.72 U	0.74 U	0.74 U
4-Chlorophenyl phenyl ether	mg/kg	500	1000	8.2	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
4-Nitroaniline	mg/kg	200	2500	1	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
4-Nitrophenol	mg/kg				0.79 U	0.74 U	0.72 U	0.74 U	0.74 U
Acenaphthene	mg/kg	1000	2500	8.4	0.20 U	0.19 U	0.18 U	0.19 U	0.19 U
Acenaphthylene	mg/kg	1000	2500	8.4	0.20 U	0.19 U	0.18 U	0.19 U	0.19 U
Aniline	mg/kg	107			0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
Anthracene	mg/kg	1000	2500	40	0.20 U	0.19 U	0.18 U	0.19 U	0.19 U
Benzo(a)anthracene	mg/kg	1	7.8	1	0.20 U	0.19 U	0.18 U	0.19 U	0.19 U
Benzo(a)pyrene	mg/kg	1	1	1	0.20 U	0.19 U	0.18 U	0.19 U	0.19 U
Benzo(b)fluoranthene	mg/kg	1	7.8	1	0.20 U	0.19 U	0.18 U	0.19 U	0.19 U
Benzo(g,h,i)perylene	mg/kg	1000	2500	4.2	0.20 U	0.19 U	0.18 U	0.19 U	0.19 U
Benzo(k)fluoranthene	mg/kg	8.4	78	1	0.20 U	0.19 U	0.18 U	0.19 U	0.19 U
bis(2-Chloroethoxy)methane	mg/kg				0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
bis(2-Chloroethyl)ether	mg/kg	1	5.2	1	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U
bis(2-Ethylhexyl)phthalate (DEHP)	mg/kg	44	410	1	0.41 UJ	0.38 UJ	0.37 UJ	0.38 UJ	0.38 UJ
Butyl benzylphthalate (BBP)	mg/kg	1000	2500	20	0.41 U	0.38 U	0.37 U	0.38 U	0.38 U

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FAIRFIELD, CONNECTICUT

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<i>Sample Depth:</i>	<i>Res</i>	<i>IC</i>	<i>PMC</i>	<i>(3-5) ft BGS</i>	<i>(4-5) ft BGS</i>	<i>(3-5) ft BGS</i>	<i>(3-4) ft BGS</i>	<i>(2-3) ft BGS</i>
<i>Sample ID:</i>				<i>SO-86111-102714-AB-001</i>	<i>SO-86111-102714-AB-002</i>	<i>SO-86111-102714-AB-003</i>	<i>SO-86111-102714-AB-004</i>	<i>SO-86111-102714-AB-005</i>
<i>Sample Date:</i>				<i>10/27/2014</i>	<i>10/27/2014</i>	<i>10/27/2014</i>	<i>10/27/2014</i>	<i>10/27/2014</i>
<i>Parameters</i>	<i>Units</i>	<i>a</i>	<i>b</i>	<i>c</i>				
Carbazole	mg/kg	31	290	1	0.20 U	0.19 U	0.18 U	0.19 U
Chrysene	mg/kg	84	780	1	0.20 U	0.19 U	0.18 U	0.19 U
Dibenz(a,h)anthracene	mg/kg	1	1	1	0.20 U	0.19 U	0.18 U	0.19 U
Dibenzofuran	mg/kg	270	2500	1	0.41 U	0.38 U	0.37 U	0.38 U
Diethyl phthalate	mg/kg	1000	1000	110	0.41 U	0.38 U	0.37 U	0.38 U
Dimethyl phthalate	mg/kg	1000	1000	110	0.41 U	0.38 U	0.37 U	0.38 U
Di-n-butylphthalate (DBP)	mg/kg	1000	2500	14	0.41 U	0.38 U	0.37 U	0.38 U
Di-n-octyl phthalate (DnOP)	mg/kg	1000	2500	2	0.81 U	0.75 U	0.73 U	0.75 U
Fluoranthene	mg/kg	1000	2500	5.6	0.20 U	0.19 U	0.18 U	0.19 U
Fluorene	mg/kg	1000	2500	5.6	0.20 U	0.19 U	0.18 U	0.19 U
Hexachlorobenzene	mg/kg	1	3.6	1	0.41 U	0.38 U	0.37 U	0.38 U
Hexachlorobutadiene	mg/kg	7.9	73	1	0.41 U	0.38 U	0.37 U	0.38 U
Hexachlorocyclopentadiene	mg/kg	470	2500	1	0.41 U	0.38 U	0.37 U	0.38 U
Hexachloroethane	mg/kg	44	410	1	0.41 U	0.38 U	0.37 U	0.38 U
Indeno(1,2,3-cd)pyrene	mg/kg	1	7.8	1	0.20 U	0.19 U	0.18 U	0.19 U
Isophorone	mg/kg	640	2500	1	0.41 U	0.38 U	0.37 U	0.38 U
Naphthalene	mg/kg	1000	2500	5.6	0.20 U	0.19 U	0.18 U	0.19 U
Nitrobenzene	mg/kg	34	1000	1	0.41 U	0.38 U	0.37 U	0.38 U
N-Nitrosodi-n-propylamine	mg/kg	1	1	1	0.41 U	0.38 U	0.37 U	0.38 U
N-Nitrosodiphenylamine	mg/kg	130	1200	1	0.41 U	0.38 U	0.37 U	0.38 U
Pentachloronitrobenzene	mg/kg	2.4			0.41 U	0.38 U	0.37 U	0.38 U
Pentachlorophenol	mg/kg	5.1	48	1	0.41 U	0.38 U	0.37 U	0.38 U
Phenanthrene	mg/kg	1000	2500	4	0.20 U	0.19 U	0.18 U	0.19 U
Phenol	mg/kg	1000	2500	80	0.41 U	0.38 U	0.37 U	0.38 U
Pyrene	mg/kg	1000	2500	4	0.20 U	0.19 U	0.18 U	0.19 U
Pyridine	mg/kg	7			0.41 U	0.38 U	0.37 U	0.38 U
<i>Metals</i>								
Arsenic	mg/kg	10	10		2.9 U	2.6 U	2.8 U	2.8 U
Barium	mg/kg	4700	140000		75	87	120	94
Cadmium	mg/kg	34	1000		0.47	0.52	0.50	0.58
Chromium	mg/kg	100	100		28	27	30	30
Lead	mg/kg	400	1000		11	11	11	19
Mercury	mg/kg	20	610		0.029 UJ	0.034	0.074	0.046
Selenium	mg/kg	340	10000		5.7 U	5.2 U	5.5 U	5.7 U
Silver	mg/kg	340	10000		0.57 U	0.52 U	0.55 U	0.57 U
Arsenic	mg/L			0.05	0.002 U	0.002 U	0.002 U	0.002 U
Barium	mg/L			1	0.05 UJ	0.05 UJ	0.05 UJ	0.05 UJ
Cadmium	mg/L			0.005	0.0025 UJ	0.0025 U	0.0025 UJ	0.0025 UJ
Chromium	mg/L			0.05	0.005 UJ	0.006	0.0055	0.005 UJ
Lead	mg/L			0.015	0.005 UJ	0.005 U	0.005 UJ	0.005 UJ
Mercury	mg/L			0.002	0.00010 U	0.00010 U	0.00010 U	0.00010 U
Selenium	mg/L			0.05	0.025 U	0.025 U	0.025 U	0.025 U
Silver	mg/L			0.036	0.0025 U	0.0025 U	0.0025 U	0.0025 UJ
<i>PCBs</i>								
Aroclor-1016 (PCB-1016)	mg/kg				0.12 U / 0.12 U	0.11 U / 0.11 U	0.11 U / 0.11 U	0.11 U / 0.11 U
Aroclor-1221 (PCB-1221)	mg/kg				0.12 U / 0.12 U	0.11 U / 0.11 U	0.11 U / 0.11 U	0.11 U / 0.11 U
Aroclor-1232 (PCB-1232)	mg/kg				0.12 U / 0.12 U	0.11 U / 0.11 U	0.11 U / 0.11 U	0.11 U / 0.11 U
Aroclor-1242 (PCB-1242)	mg/kg				0.12 U / 0.12 U	0.11 U / 0.11 U	0.11 U / 0.11 U	0.11 U / 0.11 U
Aroclor-1248 (PCB-1248)	mg/kg				0.12 U / 0.12 U	0.11 U / 0.11 U	0.11 U / 0.11 U	0.11 U / 0.11 U
Aroclor-1254 (PCB-1254)	mg/kg				0.12 U / 0.12 U	0.11 U / 0.11 U	0.11 U / 0.11 U	0.11 U / 0.11 U
Aroclor-1260 (PCB-1260)	mg/kg				0.12 U / 0.12 U	0.11 U / 0.11 U	0.11 U / 0.11 U	0.11 U / 0.11 U
Aroclor-1262 (PCB-1262)	mg/kg				0.12 U / 0.12 U	0.11 U / 0.11 U	0.11 U / 0.11 U	0.11 U / 0.11 U

TABLE 1
SOIL ANALYTICAL RESULTS SUMMARY
HAWTHORNE SUBSTATION
FAIRFIELD, CONNECTICUT

<i>Sample Location:</i>	<i>DEC</i>	<i>DEC</i>	<i>GA</i>	<i>TP-1</i>	<i>TP-2</i>	<i>TP-3</i>	<i>TP-4</i>	<i>TP-5</i>
<i>Sample Depth:</i>	<i>Res</i>	<i>IC</i>	<i>PMC</i>	<i>(3-5) ft BGS</i>	<i>(4-5) ft BGS</i>	<i>(3-5) ft BGS</i>	<i>(3-4) ft BGS</i>	<i>(2-3) ft BGS</i>
<i>Sample ID:</i>				<i>SO-86111-102714-AB-001</i>	<i>SO-86111-102714-AB-002</i>	<i>SO-86111-102714-AB-003</i>	<i>SO-86111-102714-AB-004</i>	<i>SO-86111-102714-AB-005</i>
<i>Sample Date:</i>				<i>10/27/2014</i>	<i>10/27/2014</i>	<i>10/27/2014</i>	<i>10/27/2014</i>	<i>10/27/2014</i>
<i>Parameters</i>	<i>Units</i>	<i>a</i>	<i>b</i>	<i>c</i>				
Aroclor-1268 (PCB-1268)	mg/kg				0.12 U / 0.12 U	0.11 U / 0.11 U	0.11 U / 0.11 U	0.11 U / 0.11 U
Total PCBs	mg/kg	1	10					
<i>Pesticides</i>								
4,4'-DDD	mg/kg	2.6	24		--	0.0045 U / 0.0045 U	--	--
4,4'-DDE	mg/kg	1.8	17		--	0.019 / 00.016	--	--
4,4'-DDT	mg/kg	1.8	17		--	0.0097 / 00.0091	--	--
Alachlor	mg/kg	7.7	72	0.23	--	0.022 U / 0.022 U	--	--
Aldrin	mg/kg	0.036	0.34		--	0.0056 U / 0.0056 U	--	--
alpha-BHC	mg/kg	0.097	0.91		--	0.0056 U / 0.0056 U	--	--
beta-BHC	mg/kg	0.34	3.2		--	0.0056 U / 0.0056 U	--	--
Chlordane	mg/kg	0.49	2.2	0.066	--	0.022 U / 0.022 U	--	--
delta-BHC	mg/kg	0.097	0.91		--	0.0056 U / 0.0056 U	--	--
Dieldrin	mg/kg	0.038	0.36	0.007	--	0.0045 U / 0.0045 U	--	--
Endosulfan I	mg/kg	410	1200	0.84	--	0.0056 U / 0.0056 U	--	--
Endosulfan II	mg/kg	410	1200	0.84	--	0.0090 U / 0.0090 U	--	--
Endosulfan sulfate	mg/kg	410	1200	0.84	--	0.0090 U / 0.0090 U	--	--
Endrin	mg/kg	20	610		--	0.0090 U / 0.0090 U	--	--
Endrin aldehyde	mg/kg	20	610		--	0.0090 U / 0.0090 U	--	--
Endrin ketone	mg/kg	20	610		--	0.0090 U / 0.0090 U	--	--
gamma-BHC (lindane)	mg/kg	20	610	0.02	--	0.0022 U / 0.0022 U	--	--
Heptachlor	mg/kg	0.14	1.3	0.013	--	0.0056 U / 0.0056 U	--	--
Heptachlor epoxide	mg/kg	0.067	0.63	0.02	--	0.0056 U / 0.0056 U	--	--
Hexachlorobenzene	mg/kg	1	3.6	1	--	0.0067 U / 0.0067 U	--	--
Methoxychlor	mg/kg	340	10000	0.8	--	0.056 U / 0.056 U	--	--
Toxaphene	mg/kg	0.56	5.2	0.33	--	0.11 U / 0.11 U	--	--
<i>Herbicides</i>								
2,4,5-T	mg/kg				--	0.0028 U / 0.0028 U	--	--
2,4,5-TP (Silvex)	mg/kg				--	0.0028 U / 0.0028 U	--	--
2,4-Dichlorophenoxyacetic acid (2,4-D)	mg/kg	680	20000	1.4	--	0.028 U / 0.028 U	--	--
Dalapon	mg/kg				--	0.07 U / 0.07 U	--	--
Dicamba	mg/kg				--	0.0028 U / 0.0028 U	--	--
<i>Petroleum Hydrocarbons</i>								
Total Petroleum Hydrocarbons	mg/kg	500	2500	500	11 UJ	10 UJ	10 UJ	11 UJ
<i>General Chemistry</i>								
Conductance, specific	umhos/cm				7.6	3.5	2.8	3.5
Flash point (closed cup)	Deg F				212 U	212 U	212 U	212 U
pH, lab	s.u.				5.0	5.6	5.6	5.7
Reactive cyanide	mg/kg				4.0 U	3.9 U	4.0 U	3.9 U
Reactive sulfide	mg/kg				20 U	20 U	20 U	19 U
Total solids	%				87.8 / 83.1	88.9 / 95.7	92.2 / 98.4	93.3 / 89.4

Footnotes:

- U Not detected at the associated reporting limit.
- J Estimated concentration.
- UJ Not detected; associated reporting limit is estimated.

Attachment A

Laboratory Analytical Report

November 4, 2014

Kathy Shaw - CRA
United Illuminating Company
180 Marsh Hill Road
Orange, CT 06477

Project Location: Hawthorne Substation Phase II - Fairfield, CT
Client Job Number:
Project Number: 086111-001
Laboratory Work Order Number: 14J1384

Enclosed are results of analyses for samples received by the laboratory on October 28, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "James Georgantas". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

James M. Georgantas
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

United Illuminating Company
180 Marsh Hill Road
Orange, CT 06477
ATTN: Kathy Shaw - CRA

REPORT DATE: 11/4/2014

PURCHASE ORDER NUMBER: 4500424931-10

PROJECT NUMBER: 086111-001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14J1384

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Hawthorne Substation Phase II - Fairfield, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SO-86111-102714-AB-001	14J1384-01	Soil		SM 2540G	
				SW-846 1312	
				SW-846 6010C	
				SW-846 6020A	
				SW-846 7470A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260C	
SO-86111-102714-AB-002	14J1384-02	Soil		SW-846 8270D	
				SM 2540G	
				SW-846 1312	
				SW-846 6010C	
				SW-846 6020A	
				SW-846 7470A	
				SW-846 7471B	
				SW-846 8081B	
SO-86111-102714-AB-003	14J1384-03	Soil		SW-846 8082A	
				SW-846 8151A	
				SW-846 8260C	
				SW-846 8270D	
				SM 2540G	
				SW-846 1312	
				SW-846 6010C	
				SW-846 6020A	
SO-86111-102714-AB-004	14J1384-04	Soil		SW-846 7470A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260C	
				SW-846 8270D	
				SM 2540G	
				SW-846 1312	
				SW-846 6010C	

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United Illuminating Company
180 Marsh Hill Road
Orange, CT 06477
ATTN: Kathy Shaw - CRA

REPORT DATE: 11/4/2014

PURCHASE ORDER NUMBER: 4500424931-10

PROJECT NUMBER: 086111-001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14J1384

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Hawthorne Substation Phase II - Fairfield, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SO-86111-102714-AB-005	14J1384-05	Soil		SM 2540G SW-846 1312 SW-846 6010C SW-846 6020A SW-846 7470A SW-846 7471B SW-846 8082A SW-846 8260C SW-846 8270D	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

For method 8151, samples were derivatized on 11/03/14.

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SW-846 8081B

Qualifications:**V-06**

Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.

Analyte & Samples(s) Qualified:**alpha-BHC**

B108415-BS1, B108415-BSD1

gamma-BHC (Lindane)

B108415-BS1, B108415-BSD1

SW-846 8082A

Qualifications:**O-32**

A five times dilution was performed as part of the standard analytical procedure.

Analyte & Samples(s) Qualified:

14J1384-01[SO-86111-102714-AB-001], 14J1384-02[SO-86111-102714-AB-002], 14J1384-03[SO-86111-102714-AB-003], 14J1384-04[SO-86111-102714-AB-004], 14J1384-05[SO-86111-102714-AB-005]

SW-846 8260C

Qualifications:**V-05**

Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.

Analyte & Samples(s) Qualified:**Acetone**

14J1384-01[SO-86111-102714-AB-001], 14J1384-02[SO-86111-102714-AB-002], 14J1384-03[SO-86111-102714-AB-003], 14J1384-04[SO-86111-102714-AB-004], 14J1384-05[SO-86111-102714-AB-005], B108745-BLK1, B108745-BS1

SW-846 8270D

Qualifications:**L-07**

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:**4-Chloroaniline**

B108426-BSD1

Aniline

B108426-BSD1

V-06

Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.

Analyte & Samples(s) Qualified:**4-Nitrophenol**

B108426-BS1, B108426-BSD1

V-16

Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.

Analyte & Samples(s) Qualified:**Pentachloronitrobenzene**

14J1384-01[SO-86111-102714-AB-001], 14J1384-02[SO-86111-102714-AB-002], 14J1384-03[SO-86111-102714-AB-003], 14J1384-04[SO-86111-102714-AB-004], 14J1384-05[SO-86111-102714-AB-005], B108426-BLK1, B108426-BS1, B108426-BSD1

V-20

Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:**4-Nitrophenol**

14J1384-01[SO-86111-102714-AB-001], 14J1384-02[SO-86111-102714-AB-002], 14J1384-03[SO-86111-102714-AB-003], 14J1384-04[SO-86111-102714-AB-004], 14J1384-05[SO-86111-102714-AB-005], B108426-BLK1

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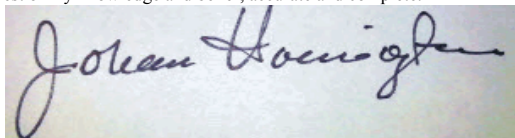
SW-846 8270D

The LCS sample recoveries for required RCP 8270 compounds were all within control limits specified by the method, 40-140% for base/neutrals and 30-130% for acids except for "difficult analytes" listed below and/or otherwise listed in this narrative: Difficult analytes for soil - limits between 10 and 180% depending on the compound (see QC summary for limits): 3,3'-Dichlorobenzidine, Pyridine, Aniline, 4-Chloroaniline, 3-Nitroaniline, and n-Nitrosodiphenylamine.

All reporting limits specified on the chain-of-custody were met, except for Pyridine, 1,2,4,5-Tetrachlorobenzene and Pentachloronitrobenzene for the most protective criteria since the laboratory cannot achieve the required RCP calibration criteria at these levels unless otherwise listed in this narrative.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

A handwritten signature in black ink, appearing to read "Johanna K. Harrington", is written over a light blue background.

Johanna K. Harrington

Manager, Laboratory Reporting

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-001

Sampled: 10/27/2014 09:15

Sample ID: 14J1384-01

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	mg/Kg dry	1	V-05	SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Acrylonitrile	ND	0.0068	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Benzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Bromobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Bromodichloromethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Bromoform	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Bromomethane	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
2-Butanone (MEK)	ND	0.045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
n-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
sec-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
tert-Butylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Carbon Disulfide	ND	0.0068	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Carbon Tetrachloride	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Chlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Chloroethane	ND	0.023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Chloroform	ND	0.0045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
2-Chlorotoluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
4-Chlorotoluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Dibromomethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,2-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,3-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,4-Dichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
trans-1,4-Dichloro-2-butene	ND	0.0045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,1-Dichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,2-Dichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,1-Dichloroethylene	ND	0.0045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
cis-1,2-Dichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
trans-1,2-Dichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,2-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
2,2-Dichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,1-Dichloropropene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Ethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Hexachlorobutadiene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
2-Hexanone (MBK)	ND	0.023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Isopropylbenzene (Cumene)	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-001

Sampled: 10/27/2014 09:15

Sample ID: 14J1384-01

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.0045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Methylene Chloride	ND	0.023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Naphthalene	ND	0.0045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
n-Propylbenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Styrene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,1,1,2-Tetrachloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Tetrachloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Toluene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,2,3-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,2,4-Trichlorobenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,1,1-Trichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,1,2-Trichloroethane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Trichloroethylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,2,3-Trichloropropane	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,2,4-Trimethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
1,3,5-Trimethylbenzene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
m+p Xylene	ND	0.0045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
o-Xylene	ND	0.0023	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:23	MFF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	101	70-130							
Toluene-d8	99.8	70-130							
4-Bromofluorobenzene	98.1	70-130							

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-001

Sampled: 10/27/2014 09:15

Sample ID: 14J1384-01

Sample Matrix: Soil

Semivolatiles Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Acenaphthylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Aniline	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Benzo(a)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Benzo(a)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Benzo(b)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Benzo(g,h,i)perylene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Benzo(k)fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Bis(2-chloroethoxy)methane	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Bis(2-chloroethyl)ether	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Bis(2-chloroisopropyl)ether	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Bis(2-Ethylhexyl)phthalate	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
4-Bromophenylphenylether	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Butylbenzylphthalate	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Carbazole	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
4-Chloroaniline	ND	0.79	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
4-Chloro-3-methylphenol	ND	0.79	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
2-Chloronaphthalene	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
2-Chlorophenol	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
4-Chlorophenylphenylether	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Chrysene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Dibenz(a,h)anthracene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Dibenzofuran	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Di-n-butylphthalate	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
3,3-Dichlorobenzidine	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
2,4-Dichlorophenol	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Diethylphthalate	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
2,4-Dimethylphenol	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Dimethylphthalate	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
4,6-Dinitro-2-methylphenol	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
2,4-Dinitrophenol	ND	0.79	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
2,4-Dinitrotoluene	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
2,6-Dinitrotoluene	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Di-n-octylphthalate	ND	0.81	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Fluoranthene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Fluorene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Hexachlorobenzene	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Hexachlorobutadiene	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Hexachlorocyclopentadiene	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Hexachloroethane	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Indeno(1,2,3-cd)pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Isophorone	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
2-Methylnaphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-001

Sampled: 10/27/2014 09:15

Sample ID: 14J1384-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
3/4-Methylphenol	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Naphthalene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
2-Nitroaniline	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
3-Nitroaniline	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
4-Nitroaniline	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Nitrobenzene	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
2-Nitrophenol	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
4-Nitrophenol	ND	0.79	mg/Kg dry	1	V-20	SW-846 8270D	10/30/14	10/30/14 20:15	CMR
N-Nitrosodiphenylamine	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
N-Nitrosodi-n-propylamine	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Pentachloronitrobenzene	ND	0.41	mg/Kg dry	1	V-16	SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Pentachlorophenol	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Phenanthrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Phenol	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Pyrene	ND	0.20	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
Pyridine	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
1,2,4,5-Tetrachlorobenzene	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
1,2,4-Trichlorobenzene	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
2,4,5-Trichlorophenol	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR
2,4,6-Trichlorophenol	ND	0.41	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:15	CMR

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	91.2	30-130	10/30/14 20:15
Phenol-d6	94.6	30-130	10/30/14 20:15
Nitrobenzene-d5	92.0	30-130	10/30/14 20:15
2-Fluorobiphenyl	91.9	30-130	10/30/14 20:15
2,4,6-Tribromophenol	113	30-130	10/30/14 20:15
p-Terphenyl-d14	105	30-130	10/30/14 20:15

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-001

Sampled: 10/27/2014 09:15

Sample ID: 14J1384-01

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 19:49	JMB
Aroclor-1221 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 19:49	JMB
Aroclor-1232 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 19:49	JMB
Aroclor-1242 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 19:49	JMB
Aroclor-1248 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 19:49	JMB
Aroclor-1254 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 19:49	JMB
Aroclor-1260 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 19:49	JMB
Aroclor-1262 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 19:49	JMB
Aroclor-1268 [1]	ND	0.12	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 19:49	JMB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	84.7	30-150						10/30/14 19:49	
Decachlorobiphenyl [2]	87.5	30-150						10/30/14 19:49	
Tetrachloro-m-xylene [1]	76.2	30-150						10/30/14 19:49	
Tetrachloro-m-xylene [2]	77.3	30-150						10/30/14 19:49	

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-001

Sampled: 10/27/2014 09:15

Sample ID: 14J1384-01

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.9	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 19:51	OP
Barium	75	2.9	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 19:51	OP
Cadmium	0.47	0.29	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 19:51	OP
Chromium	28	0.57	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 19:51	OP
Lead	11	0.86	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 19:51	OP
Mercury	ND	0.029	mg/Kg dry	1		SW-846 7471B	10/29/14	11/3/14 11:48	SCB
Selenium	ND	5.7	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 19:51	OP
Silver	ND	0.57	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 19:51	OP

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-001

Sampled: 10/27/2014 09:15

Sample ID: 14J1384-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	83.1		% Wt	1		SM 2540G	10/29/14	10/29/14 12:53	MRL

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-001

Sampled: 10/27/2014 09:15

Sample ID: 14J1384-01

Sample Matrix: Soil

SPLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:34	KSH
Barium	ND	50	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:34	KSH
Cadmium	ND	2.5	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:34	KSH
Chromium	ND	5.0	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:34	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:34	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	10/31/14	10/31/14 16:14	SCB
Selenium	ND	25	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:34	KSH
Silver	ND	2.5	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:34	KSH

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-002

Sampled: 10/27/2014 10:30

Sample ID: 14J1384-02

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	mg/Kg dry	1	V-05	SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Acrylonitrile	ND	0.0067	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Benzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Bromobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Bromodichloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Bromoform	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Bromomethane	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
2-Butanone (MEK)	ND	0.045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
n-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
sec-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
tert-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Carbon Disulfide	ND	0.0067	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Carbon Tetrachloride	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Chlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Chloroethane	ND	0.022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Chloroform	ND	0.0045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
2-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
4-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Dibromomethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,2-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,3-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,4-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
trans-1,4-Dichloro-2-butene	ND	0.0045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,1-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,2-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,1-Dichloroethylene	ND	0.0045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
cis-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
trans-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
2,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,1-Dichloropropene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Ethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Hexachlorobutadiene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
2-Hexanone (MBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Isopropylbenzene (Cumene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-002

Sampled: 10/27/2014 10:30

Sample ID: 14J1384-02

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.0045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Methylene Chloride	ND	0.022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Naphthalene	ND	0.0045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
n-Propylbenzene	ND	0.0045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Styrene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,1,1,2-Tetrachloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Tetrachloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Toluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,2,3-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,2,4-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,1,1-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,1,2-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Trichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,2,3-Trichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,2,4-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
1,3,5-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
m+p Xylene	ND	0.0045	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
o-Xylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 8:51	MFF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	103	70-130							
Toluene-d8	99.6	70-130							
4-Bromofluorobenzene	96.8	70-130							

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-002

Sampled: 10/27/2014 10:30

Sample ID: 14J1384-02

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Aniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Bis(2-chloroethoxy)methane	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Bis(2-chloroethyl)ether	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Bis(2-chloroisopropyl)ether	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Bis(2-Ethylhexyl)phthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
4-Bromophenylphenylether	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Butylbenzylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Carbazole	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
4-Chloroaniline	ND	0.74	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
4-Chloro-3-methylphenol	ND	0.74	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
2-Chloronaphthalene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
2-Chlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
4-Chlorophenylphenylether	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Dibenzofuran	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Di-n-butylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
3,3-Dichlorobenzidine	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
2,4-Dichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Diethylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
2,4-Dimethylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Dimethylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
4,6-Dinitro-2-methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
2,4-Dinitrophenol	ND	0.74	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
2,4-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
2,6-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Di-n-octylphthalate	ND	0.75	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Hexachlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Hexachlorobutadiene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Hexachlorocyclopentadiene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Hexachloroethane	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Isophorone	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-002

Sampled: 10/27/2014 10:30

Sample ID: 14J1384-02

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
3/4-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
2-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
3-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
4-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Nitrobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
2-Nitrophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
4-Nitrophenol	ND	0.74	mg/Kg dry	1	V-20	SW-846 8270D	10/30/14	10/30/14 20:38	CMR
N-Nitrosodiphenylamine	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
N-Nitrosodi-n-propylamine	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Pentachloronitrobenzene	ND	0.38	mg/Kg dry	1	V-16	SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Pentachlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Phenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
Pyridine	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
1,2,4,5-Tetrachlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
1,2,4-Trichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
2,4,5-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR
2,4,6-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 20:38	CMR

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	75.2	30-130	10/30/14 20:38
Phenol-d6	77.2	30-130	10/30/14 20:38
Nitrobenzene-d5	76.1	30-130	10/30/14 20:38
2-Fluorobiphenyl	76.3	30-130	10/30/14 20:38
2,4,6-Tribromophenol	94.2	30-130	10/30/14 20:38
p-Terphenyl-d14	92.0	30-130	10/30/14 20:38

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-002

Sampled: 10/27/2014 10:30

Sample ID: 14J1384-02

Sample Matrix: Soil

Organochloride Pesticides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Alachlor [2]	ND	0.022	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
Aldrin [1]	ND	0.0056	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
alpha-BHC [2]	ND	0.0056	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
beta-BHC [1]	ND	0.0056	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
delta-BHC [1]	ND	0.0056	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
gamma-BHC (Lindane) [2]	ND	0.0022	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
Chlordane [1]	ND	0.022	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
4,4'-DDD [1]	ND	0.0045	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
4,4'-DDE [2]	0.019	0.0045	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
4,4'-DDT [2]	0.0097	0.0045	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
Dieldrin [1]	ND	0.0045	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
Endosulfan I [1]	ND	0.0056	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
Endosulfan II [1]	ND	0.0090	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
Endosulfan sulfate [1]	ND	0.0090	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
Endrin [1]	ND	0.0090	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
Endrin aldehyde [1]	ND	0.0090	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
Endrin ketone [1]	ND	0.0090	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
Heptachlor [1]	ND	0.0056	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
Heptachlor epoxide [1]	ND	0.0056	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
Hexachlorobenzene [1]	ND	0.0067	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
Methoxychlor [1]	ND	0.056	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
Toxaphene [1]	ND	0.11	mg/Kg dry	1		SW-846 8081B	10/29/14	10/31/14 21:49	PJG
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	92.6	30-150							
Decachlorobiphenyl [2]	102	30-150							
Tetrachloro-m-xylene [1]	84.3	30-150							
Tetrachloro-m-xylene [2]	84.3	30-150							

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-002

Sampled: 10/27/2014 10:30

Sample ID: 14J1384-02

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:02	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:02	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:02	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:02	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:02	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:02	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:02	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:02	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:02	JMB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	96.4	30-150							
Decachlorobiphenyl [2]	100	30-150							
Tetrachloro-m-xylene [1]	88.1	30-150							
Tetrachloro-m-xylene [2]	89.2	30-150							

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-002

Sampled: 10/27/2014 10:30

Sample ID: 14J1384-02

Sample Matrix: Soil

Herbicides by GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4-D [1]	ND	28	µg/kg dry	1		SW-846 8151A	10/30/14	11/4/14 5:08	PJG
2,4,5-TP (Silvex) [1]	ND	2.8	µg/kg dry	1		SW-846 8151A	10/30/14	11/4/14 5:08	PJG
2,4,5-T [1]	ND	2.8	µg/kg dry	1		SW-846 8151A	10/30/14	11/4/14 5:08	PJG
Dalapon [1]	ND	70	µg/kg dry	1		SW-846 8151A	10/30/14	11/4/14 5:08	PJG
Dicamba [1]	ND	2.8	µg/kg dry	1		SW-846 8151A	10/30/14	11/4/14 5:08	PJG
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
2,4-Dichlorophenylacetic acid [1]	86.6	30-150						11/4/14 5:08	
2,4-Dichlorophenylacetic acid [2]	80.3	30-150						11/4/14 5:08	

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-002

Sampled: 10/27/2014 10:30

Sample ID: 14J1384-02

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.6	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:15	OP
Barium	87	2.6	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:15	OP
Cadmium	0.52	0.26	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:15	OP
Chromium	27	0.52	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:15	OP
Lead	11	0.78	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:15	OP
Mercury	0.034	0.028	mg/Kg dry	1		SW-846 7471B	10/28/14	10/30/14 11:23	SCB
Selenium	ND	5.2	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:15	OP
Silver	ND	0.52	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:15	OP

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-002

Sampled: 10/27/2014 10:30

Sample ID: 14J1384-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.9		% Wt	1		SM 2540G	10/29/14	10/29/14 12:53	MRL

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-002

Sampled: 10/27/2014 10:30

Sample ID: 14J1384-02

Sample Matrix: Soil

SPLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:39	KSH
Barium	ND	50	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:39	KSH
Cadmium	ND	2.5	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:39	KSH
Chromium	6.0	5.0	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:39	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:39	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	10/31/14	10/31/14 16:19	SCB
Selenium	ND	25	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:39	KSH
Silver	ND	2.5	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:39	KSH

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-003

Sampled: 10/27/2014 11:00

Sample ID: 14J1384-03

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	mg/Kg dry	1	V-05	SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Acrylonitrile	ND	0.0066	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Benzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Bromobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Bromodichloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Bromoform	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Bromomethane	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
2-Butanone (MEK)	ND	0.044	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
n-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
sec-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
tert-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Carbon Disulfide	ND	0.0066	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Carbon Tetrachloride	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Chlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Chloroethane	ND	0.022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Chloroform	ND	0.0044	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
2-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
4-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Dibromomethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,2-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,3-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,4-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
trans-1,4-Dichloro-2-butene	ND	0.0044	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,1-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,2-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,1-Dichloroethylene	ND	0.0044	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
cis-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
trans-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
2,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,1-Dichloropropene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Ethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Hexachlorobutadiene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
2-Hexanone (MBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Isopropylbenzene (Cumene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-003

Sampled: 10/27/2014 11:00

Sample ID: 14J1384-03

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.0044	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Methylene Chloride	ND	0.022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Naphthalene	ND	0.0044	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
n-Propylbenzene	ND	0.0044	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Styrene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,1,1,2-Tetrachloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Tetrachloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Toluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,2,3-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,2,4-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,1,1-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,1,2-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Trichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,2,3-Trichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,2,4-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
1,3,5-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
m+p Xylene	ND	0.0044	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
o-Xylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:18	MFF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	107	70-130							
Toluene-d8	99.8	70-130							
4-Bromofluorobenzene	95.0	70-130							

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-003

Sampled: 10/27/2014 11:00

Sample ID: 14J1384-03

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Acenaphthylene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Aniline	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Benzo(a)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Benzo(a)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Benzo(b)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Benzo(g,h,i)perylene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Benzo(k)fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Bis(2-chloroethoxy)methane	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Bis(2-chloroethyl)ether	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Bis(2-chloroisopropyl)ether	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Bis(2-Ethylhexyl)phthalate	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
4-Bromophenylphenylether	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Butylbenzylphthalate	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Carbazole	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
4-Chloroaniline	ND	0.72	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
4-Chloro-3-methylphenol	ND	0.72	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
2-Chloronaphthalene	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
2-Chlorophenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
4-Chlorophenylphenylether	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Chrysene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Dibenz(a,h)anthracene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Dibenzofuran	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Di-n-butylphthalate	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
3,3-Dichlorobenzidine	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
2,4-Dichlorophenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Diethylphthalate	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
2,4-Dimethylphenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Dimethylphthalate	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
4,6-Dinitro-2-methylphenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
2,4-Dinitrophenol	ND	0.72	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
2,4-Dinitrotoluene	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
2,6-Dinitrotoluene	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Di-n-octylphthalate	ND	0.73	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Fluoranthene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Fluorene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Hexachlorobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Hexachlorobutadiene	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Hexachlorocyclopentadiene	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Hexachloroethane	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Indeno(1,2,3-cd)pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Isophorone	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
2-Methylnaphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-003

Sampled: 10/27/2014 11:00

Sample ID: 14J1384-03

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
3/4-Methylphenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Naphthalene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
2-Nitroaniline	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
3-Nitroaniline	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
4-Nitroaniline	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Nitrobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
2-Nitrophenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
4-Nitrophenol	ND	0.72	mg/Kg dry	1	V-20	SW-846 8270D	10/30/14	10/30/14 21:00	CMR
N-Nitrosodiphenylamine	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
N-Nitrosodi-n-propylamine	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Pentachloronitrobenzene	ND	0.37	mg/Kg dry	1	V-16	SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Pentachlorophenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Phenanthrene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Phenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Pyrene	ND	0.18	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
Pyridine	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
1,2,4,5-Tetrachlorobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
1,2,4-Trichlorobenzene	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
2,4,5-Trichlorophenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR
2,4,6-Trichlorophenol	ND	0.37	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:00	CMR

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	95.6	30-130	10/30/14 21:00
Phenol-d6	98.9	30-130	10/30/14 21:00
Nitrobenzene-d5	94.9	30-130	10/30/14 21:00
2-Fluorobiphenyl	97.7	30-130	10/30/14 21:00
2,4,6-Tribromophenol	123	30-130	10/30/14 21:00
p-Terphenyl-d14	114	30-130	10/30/14 21:00

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-003

Sampled: 10/27/2014 11:00

Sample ID: 14J1384-03

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:15	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:15	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:15	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:15	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:15	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:15	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:15	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:15	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:15	JMB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	94.9	30-150						10/30/14 20:15	
Decachlorobiphenyl [2]	96.3	30-150						10/30/14 20:15	
Tetrachloro-m-xylene [1]	84.2	30-150						10/30/14 20:15	
Tetrachloro-m-xylene [2]	85.3	30-150						10/30/14 20:15	

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-003

Sampled: 10/27/2014 11:00

Sample ID: 14J1384-03

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.8	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:20	OP
Barium	120	2.8	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:20	OP
Cadmium	0.50	0.28	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:20	OP
Chromium	30	0.55	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:20	OP
Lead	11	0.83	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:20	OP
Mercury	0.074	0.026	mg/Kg dry	1		SW-846 7471B	10/29/14	11/3/14 11:50	SCB
Selenium	ND	5.5	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:20	OP
Silver	ND	0.55	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:20	OP

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-003

Sampled: 10/27/2014 11:00

Sample ID: 14J1384-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	92.2		% Wt	1		SM 2540G	10/29/14	10/29/14 12:53	MRL

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-003

Sampled: 10/27/2014 11:00

Sample ID: 14J1384-03

Sample Matrix: Soil

SPLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:43	KSH
Barium	ND	50	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:43	KSH
Cadmium	ND	2.5	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:43	KSH
Chromium	5.5	5.0	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:43	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:43	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	10/31/14	10/31/14 16:20	SCB
Selenium	ND	25	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:43	KSH
Silver	ND	2.5	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:43	KSH

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-004

Sampled: 10/27/2014 11:25

Sample ID: 14J1384-04

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.11	mg/Kg dry	1	V-05	SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Acrylonitrile	ND	0.0065	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Benzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Bromobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Bromodichloromethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Bromoform	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Bromomethane	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
2-Butanone (MEK)	ND	0.043	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
n-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
sec-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
tert-Butylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Carbon Disulfide	ND	0.0065	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Carbon Tetrachloride	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Chlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Chlorodibromomethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Chloroethane	ND	0.022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Chloroform	ND	0.0043	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Chloromethane	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
2-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
4-Chlorotoluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Dibromomethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,2-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,3-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,4-Dichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
trans-1,4-Dichloro-2-butene	ND	0.0043	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,1-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,2-Dichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,1-Dichloroethylene	ND	0.0043	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
cis-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
trans-1,2-Dichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,3-Dichloropropane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
2,2-Dichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,1-Dichloropropene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
cis-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
trans-1,3-Dichloropropene	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Ethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Hexachlorobutadiene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
2-Hexanone (MBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Isopropylbenzene (Cumene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-004

Sampled: 10/27/2014 11:25

Sample ID: 14J1384-04

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.0043	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Methylene Chloride	ND	0.022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Naphthalene	ND	0.0043	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
n-Propylbenzene	ND	0.0043	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Styrene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,1,1,2-Tetrachloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Tetrachloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Tetrahydrofuran	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Toluene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,2,3-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,2,4-Trichlorobenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,1,1-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,1,2-Trichloroethane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Trichloroethylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,2,3-Trichloropropane	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,2,4-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
1,3,5-Trimethylbenzene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Vinyl Chloride	ND	0.011	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
m+p Xylene	ND	0.0043	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
o-Xylene	ND	0.0022	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 9:45	MFF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	103	70-130							
Toluene-d8	99.7	70-130							
4-Bromofluorobenzene	96.9	70-130							

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-004

Sampled: 10/27/2014 11:25

Sample ID: 14J1384-04

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Aniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Bis(2-chloroethoxy)methane	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Bis(2-chloroethyl)ether	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Bis(2-chloroisopropyl)ether	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Bis(2-Ethylhexyl)phthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
4-Bromophenylphenylether	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Butylbenzylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Carbazole	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
4-Chloroaniline	ND	0.74	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
4-Chloro-3-methylphenol	ND	0.74	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
2-Chloronaphthalene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
2-Chlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
4-Chlorophenylphenylether	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Dibenzofuran	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Di-n-butylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
3,3-Dichlorobenzidine	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
2,4-Dichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Diethylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
2,4-Dimethylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Dimethylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
4,6-Dinitro-2-methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
2,4-Dinitrophenol	ND	0.74	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
2,4-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
2,6-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Di-n-octylphthalate	ND	0.75	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Hexachlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Hexachlorobutadiene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Hexachlorocyclopentadiene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Hexachloroethane	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Isophorone	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-004

Sampled: 10/27/2014 11:25

Sample ID: 14J1384-04

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
3/4-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
2-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
3-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
4-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Nitrobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
2-Nitrophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
4-Nitrophenol	ND	0.74	mg/Kg dry	1	V-20	SW-846 8270D	10/30/14	10/30/14 21:24	CMR
N-Nitrosodiphenylamine	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
N-Nitrosodi-n-propylamine	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Pentachloronitrobenzene	ND	0.38	mg/Kg dry	1	V-16	SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Pentachlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Phenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
Pyridine	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
1,2,4,5-Tetrachlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
1,2,4-Trichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
2,4,5-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR
2,4,6-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:24	CMR

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	84.6	30-130	10/30/14 21:24
Phenol-d6	88.9	30-130	10/30/14 21:24
Nitrobenzene-d5	85.8	30-130	10/30/14 21:24
2-Fluorobiphenyl	89.7	30-130	10/30/14 21:24
2,4,6-Tribromophenol	113	30-130	10/30/14 21:24
p-Terphenyl-d14	109	30-130	10/30/14 21:24

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-004

Sampled: 10/27/2014 11:25

Sample ID: 14J1384-04

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:27	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:27	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:27	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:27	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:27	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:27	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:27	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:27	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:27	JMB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	95.0	30-150							
Decachlorobiphenyl [2]	96.0	30-150							
Tetrachloro-m-xylene [1]	87.2	30-150							
Tetrachloro-m-xylene [2]	87.9	30-150							

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-004

Sampled: 10/27/2014 11:25

Sample ID: 14J1384-04

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.8	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:25	OP
Barium	94	2.8	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:25	OP
Cadmium	0.58	0.28	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:25	OP
Chromium	30	0.57	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:25	OP
Lead	19	0.85	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:25	OP
Mercury	0.046	0.028	mg/Kg dry	1		SW-846 7471B	10/28/14	10/30/14 11:25	SCB
Selenium	ND	5.7	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:25	OP
Silver	ND	0.57	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:25	OP

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-004

Sampled: 10/27/2014 11:25

Sample ID: 14J1384-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	89.4		% Wt	1		SM 2540G	10/29/14	10/29/14 12:53	MRL

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-004

Sampled: 10/27/2014 11:25

Sample ID: 14J1384-04

Sample Matrix: Soil

SPLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:48	KSH
Barium	ND	50	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:48	KSH
Cadmium	ND	2.5	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:48	KSH
Chromium	ND	5.0	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:48	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:48	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	10/31/14	10/31/14 16:22	SCB
Selenium	ND	25	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:48	KSH
Silver	ND	2.5	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:48	KSH

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-005

Sampled: 10/27/2014 12:30

Sample ID: 14J1384-05

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.099	mg/Kg dry	1	V-05	SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Acrylonitrile	ND	0.0059	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Benzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Bromobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Bromodichloromethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Bromoform	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Bromomethane	ND	0.0099	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
2-Butanone (MEK)	ND	0.040	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
n-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
sec-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
tert-Butylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Carbon Disulfide	ND	0.0059	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Carbon Tetrachloride	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Chlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Chlorodibromomethane	ND	0.00099	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Chloroethane	ND	0.020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Chloroform	ND	0.0040	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Chloromethane	ND	0.0099	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
2-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
4-Chlorotoluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,2-Dibromoethane (EDB)	ND	0.00099	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Dibromomethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,2-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,3-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,4-Dichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,1-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,2-Dichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,1-Dichloroethylene	ND	0.0040	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,3-Dichloropropane	ND	0.00099	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
2,2-Dichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,1-Dichloropropene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
cis-1,3-Dichloropropene	ND	0.00099	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
trans-1,3-Dichloropropene	ND	0.00099	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Ethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Hexachlorobutadiene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
2-Hexanone (MBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-005

Sampled: 10/27/2014 12:30

Sample ID: 14J1384-05

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Methylene Chloride	ND	0.020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Naphthalene	ND	0.0040	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
n-Propylbenzene	ND	0.0040	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Styrene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,1,2,2-Tetrachloroethane	ND	0.00099	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Tetrachloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Tetrahydrofuran	ND	0.0099	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Toluene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,1,1-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,1,2-Trichloroethane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Trichloroethylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0099	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,2,3-Trichloropropane	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0099	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Vinyl Chloride	ND	0.0099	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
m+p Xylene	ND	0.0040	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
o-Xylene	ND	0.0020	mg/Kg dry	1		SW-846 8260C	11/3/14	11/3/14 10:13	MFF
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4	104	70-130							
Toluene-d8	99.6	70-130							
4-Bromofluorobenzene	96.3	70-130							

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-005

Sampled: 10/27/2014 12:30

Sample ID: 14J1384-05

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acenaphthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Acenaphthylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Aniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Benzo(a)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Benzo(a)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Benzo(b)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Benzo(g,h,i)perylene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Benzo(k)fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Bis(2-chloroethoxy)methane	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Bis(2-chloroethyl)ether	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Bis(2-chloroisopropyl)ether	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Bis(2-Ethylhexyl)phthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
4-Bromophenylphenylether	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Butylbenzylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Carbazole	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
4-Chloroaniline	ND	0.74	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
4-Chloro-3-methylphenol	ND	0.74	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
2-Chloronaphthalene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
2-Chlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
4-Chlorophenylphenylether	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Chrysene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Dibenz(a,h)anthracene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Dibenzofuran	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Di-n-butylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
3,3-Dichlorobenzidine	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
2,4-Dichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Diethylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
2,4-Dimethylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Dimethylphthalate	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
4,6-Dinitro-2-methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
2,4-Dinitrophenol	ND	0.74	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
2,4-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
2,6-Dinitrotoluene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Di-n-octylphthalate	ND	0.75	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Fluoranthene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Fluorene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Hexachlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Hexachlorobutadiene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Hexachlorocyclopentadiene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Hexachloroethane	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Indeno(1,2,3-cd)pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Isophorone	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
2-Methylnaphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-005

Sampled: 10/27/2014 12:30

Sample ID: 14J1384-05

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
3/4-Methylphenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Naphthalene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
2-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
3-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
4-Nitroaniline	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Nitrobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
2-Nitrophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
4-Nitrophenol	ND	0.74	mg/Kg dry	1	V-20	SW-846 8270D	10/30/14	10/30/14 21:47	CMR
N-Nitrosodiphenylamine	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
N-Nitrosodi-n-propylamine	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Pentachloronitrobenzene	ND	0.38	mg/Kg dry	1	V-16	SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Pentachlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Phenanthrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Phenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Pyrene	ND	0.19	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
Pyridine	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
1,2,4,5-Tetrachlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
1,2,4-Trichlorobenzene	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
2,4,5-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR
2,4,6-Trichlorophenol	ND	0.38	mg/Kg dry	1		SW-846 8270D	10/30/14	10/30/14 21:47	CMR

Surrogates	% Recovery	Recovery Limits	Flag/Qual
2-Fluorophenol	93.3	30-130	10/30/14 21:47
Phenol-d6	96.9	30-130	10/30/14 21:47
Nitrobenzene-d5	93.4	30-130	10/30/14 21:47
2-Fluorobiphenyl	97.7	30-130	10/30/14 21:47
2,4,6-Tribromophenol	120	30-130	10/30/14 21:47
p-Terphenyl-d14	114	30-130	10/30/14 21:47

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-005

Sampled: 10/27/2014 12:30

Sample ID: 14J1384-05

Sample Matrix: Soil

Sample Flags: O-32

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:40	JMB
Aroclor-1221 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:40	JMB
Aroclor-1232 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:40	JMB
Aroclor-1242 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:40	JMB
Aroclor-1248 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:40	JMB
Aroclor-1254 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:40	JMB
Aroclor-1260 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:40	JMB
Aroclor-1262 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:40	JMB
Aroclor-1268 [1]	ND	0.11	mg/Kg dry	5		SW-846 8082A	10/29/14	10/30/14 20:40	JMB
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
Decachlorobiphenyl [1]	109	30-150						10/30/14 20:40	
Decachlorobiphenyl [2]	111	30-150						10/30/14 20:40	
Tetrachloro-m-xylene [1]	98.9	30-150						10/30/14 20:40	
Tetrachloro-m-xylene [2]	100	30-150						10/30/14 20:40	

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-005

Sampled: 10/27/2014 12:30

Sample ID: 14J1384-05

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.8	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:29	OP
Barium	92	2.8	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:29	OP
Cadmium	0.38	0.28	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:29	OP
Chromium	24	0.56	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:29	OP
Lead	7.4	0.84	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:29	OP
Mercury	ND	0.027	mg/Kg dry	1		SW-846 7471B	10/28/14	10/30/14 11:26	SCB
Selenium	ND	5.6	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:29	OP
Silver	ND	0.56	mg/Kg dry	1		SW-846 6010C	10/29/14	10/31/14 20:29	OP

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-005

Sampled: 10/27/2014 12:30

Sample ID: 14J1384-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	88.8		% Wt	1		SM 2540G	10/29/14	10/29/14 12:53	MRL

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Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14J1384

Date Received: 10/28/2014

Field Sample #: SO-86111-102714-AB-005

Sampled: 10/27/2014 12:30

Sample ID: 14J1384-05

Sample Matrix: Soil

SPLP - Metals Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Arsenic	ND	2.0	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:52	KSH
Barium	340	50	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:52	KSH
Cadmium	ND	2.5	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:52	KSH
Chromium	13	5.0	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:52	KSH
Lead	ND	5.0	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:52	KSH
Mercury	ND	0.00010	mg/L	1		SW-846 7470A	10/31/14	10/31/14 16:23	SCB
Selenium	ND	25	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:52	KSH
Silver	ND	2.5	µg/L	5		SW-846 6020A	10/31/14	11/3/14 14:52	KSH

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Sample Extraction Data

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14J1384-01 [SO-86111-102714-AB-001]	B108345	10/29/14
14J1384-02 [SO-86111-102714-AB-002]	B108345	10/29/14
14J1384-03 [SO-86111-102714-AB-003]	B108345	10/29/14
14J1384-04 [SO-86111-102714-AB-004]	B108345	10/29/14
14J1384-05 [SO-86111-102714-AB-005]	B108345	10/29/14

Prep Method: SW-846 3050B-SW-846 6010C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14J1384-01 [SO-86111-102714-AB-001]	B108389	1.05	50.0	10/29/14
14J1384-02 [SO-86111-102714-AB-002]	B108389	1.08	50.0	10/29/14
14J1384-03 [SO-86111-102714-AB-003]	B108389	0.986	50.0	10/29/14
14J1384-04 [SO-86111-102714-AB-004]	B108389	0.984	50.0	10/29/14
14J1384-05 [SO-86111-102714-AB-005]	B108389	1.00	50.0	10/29/14

Prep Method: SW-846 3010A-SW-846 6020A

Leachates were extracted on 10/30/2014 per SW-846 1312 in Batch B108449

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14J1384-01 [SO-86111-102714-AB-001]	B108579	50.0	50.0	10/31/14
14J1384-02 [SO-86111-102714-AB-002]	B108579	50.0	50.0	10/31/14
14J1384-03 [SO-86111-102714-AB-003]	B108579	50.0	50.0	10/31/14
14J1384-04 [SO-86111-102714-AB-004]	B108579	50.0	50.0	10/31/14
14J1384-05 [SO-86111-102714-AB-005]	B108579	50.0	50.0	10/31/14

Prep Method: SW-846 7470A Prep-SW-846 7470A

Leachates were extracted on 10/30/2014 per SW-846 1312 in Batch B108449

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
14J1384-01 [SO-86111-102714-AB-001]	B108585	6.00	6.00	10/31/14
14J1384-02 [SO-86111-102714-AB-002]	B108585	6.00	6.00	10/31/14
14J1384-03 [SO-86111-102714-AB-003]	B108585	6.00	6.00	10/31/14
14J1384-04 [SO-86111-102714-AB-004]	B108585	6.00	6.00	10/31/14
14J1384-05 [SO-86111-102714-AB-005]	B108585	6.00	6.00	10/31/14

Prep Method: SW-846 7471-SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14J1384-02 [SO-86111-102714-AB-002]	B108287	0.604	50.0	10/28/14
14J1384-04 [SO-86111-102714-AB-004]	B108287	0.608	50.0	10/28/14
14J1384-05 [SO-86111-102714-AB-005]	B108287	0.617	50.0	10/28/14

Prep Method: SW-846 7471-SW-846 7471B

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14J1384-01 [SO-86111-102714-AB-001]	B108390	0.628	50.0	10/29/14
14J1384-03 [SO-86111-102714-AB-003]	B108390	0.617	50.0	10/29/14

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Sample Extraction Data**Prep Method: SW-846 3546-SW-846 8081B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14J1384-02 [SO-86111-102714-AB-002]	B108415	10.0	10.0	10/29/14

Prep Method: SW-846 3546-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14J1384-01 [SO-86111-102714-AB-001]	B108416	10.1	10.0	10/29/14
14J1384-02 [SO-86111-102714-AB-002]	B108416	10.0	10.0	10/29/14
14J1384-03 [SO-86111-102714-AB-003]	B108416	10.0	10.0	10/29/14
14J1384-04 [SO-86111-102714-AB-004]	B108416	10.0	10.0	10/29/14
14J1384-05 [SO-86111-102714-AB-005]	B108416	10.0	10.0	10/29/14

Prep Method: SW-846 8151-SW-846 8151A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14J1384-02 [SO-86111-102714-AB-002]	B108457	20.1	5.00	10/30/14

Prep Method: SW-846 5035-SW-846 8260C

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14J1384-01 [SO-86111-102714-AB-001]	B108745	5.32	10.0	11/03/14
14J1384-02 [SO-86111-102714-AB-002]	B108745	5.00	10.0	11/03/14
14J1384-03 [SO-86111-102714-AB-003]	B108745	4.91	10.0	11/03/14
14J1384-04 [SO-86111-102714-AB-004]	B108745	5.17	10.0	11/03/14
14J1384-05 [SO-86111-102714-AB-005]	B108745	5.68	10.0	11/03/14

Prep Method: SW-846 3546-SW-846 8270D

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14J1384-01 [SO-86111-102714-AB-001]	B108426	30.0	1.00	10/30/14
14J1384-02 [SO-86111-102714-AB-002]	B108426	30.0	1.00	10/30/14
14J1384-03 [SO-86111-102714-AB-003]	B108426	30.0	1.00	10/30/14
14J1384-04 [SO-86111-102714-AB-004]	B108426	30.0	1.00	10/30/14
14J1384-05 [SO-86111-102714-AB-005]	B108426	30.0	1.00	10/30/14

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B108745 - SW-846 5035

Blank (B108745-BLK1)

Prepared & Analyzed: 11/03/14

Acetone	ND	0.10	mg/Kg wet							V-05
Acrylonitrile	ND	0.0060	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromobenzene	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
n-Butylbenzene	ND	0.0020	mg/Kg wet							
sec-Butylbenzene	ND	0.0020	mg/Kg wet							
tert-Butylbenzene	ND	0.0020	mg/Kg wet							
Carbon Disulfide	ND	0.0060	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
2-Chlorotoluene	ND	0.0020	mg/Kg wet							
4-Chlorotoluene	ND	0.0020	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
Dibromomethane	ND	0.0020	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
trans-1,4-Dichloro-2-butene	ND	0.0040	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,3-Dichloropropane	ND	0.0010	mg/Kg wet							
2,2-Dichloropropane	ND	0.0020	mg/Kg wet							
1,1-Dichloropropene	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							
Hexachlorobutadiene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
p-Isopropyltoluene (p-Cymene)	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Naphthalene	ND	0.0040	mg/Kg wet							
n-Propylbenzene	ND	0.0040	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,1,2-Tetrachloroethane	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B108745 - SW-846 5035										
Blank (B108745-BLK1)				Prepared & Analyzed: 11/03/14						
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Tetrahydrofuran	ND	0.010	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,2,3-Trichloropropane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet							
1,2,4-Trimethylbenzene	ND	0.0020	mg/Kg wet							
1,3,5-Trimethylbenzene	ND	0.0020	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							
o-Xylene	ND	0.0020	mg/Kg wet							
Surrogate: 1,2-Dichloroethane-d4	0.0513		mg/Kg wet	0.0500		103	70-130			
Surrogate: Toluene-d8	0.0490		mg/Kg wet	0.0500		98.1	70-130			
Surrogate: 4-Bromofluorobenzene	0.0487		mg/Kg wet	0.0500		97.5	70-130			
LCS (B108745-BS1)				Prepared & Analyzed: 11/03/14						
Acetone	0.170	0.10	mg/Kg wet	0.200		84.8	70-130			V-05
Acrylonitrile	0.0209	0.0060	mg/Kg wet	0.0200		104	70-130			
Benzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
Bromobenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.3	70-130			
Bromodichloromethane	0.0215	0.0020	mg/Kg wet	0.0200		108	70-130			
Bromoform	0.0189	0.0020	mg/Kg wet	0.0200		94.7	70-130			
Bromomethane	0.0229	0.010	mg/Kg wet	0.0200		115	70-130			
2-Butanone (MEK)	0.201	0.040	mg/Kg wet	0.200		100	70-130			
n-Butylbenzene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130			
sec-Butylbenzene	0.0207	0.0020	mg/Kg wet	0.0200		104	70-130			
tert-Butylbenzene	0.0208	0.0020	mg/Kg wet	0.0200		104	70-130			
Carbon Disulfide	0.214	0.0060	mg/Kg wet	0.200		107	70-130			
Carbon Tetrachloride	0.0188	0.0020	mg/Kg wet	0.0200		94.0	70-130			
Chlorobenzene	0.0198	0.0020	mg/Kg wet	0.0200		99.0	70-130			
Chlorodibromomethane	0.0191	0.0010	mg/Kg wet	0.0200		95.4	70-130			
Chloroethane	0.0208	0.020	mg/Kg wet	0.0200		104	70-130			
Chloroform	0.0204	0.0040	mg/Kg wet	0.0200		102	70-130			
Chloromethane	0.0195	0.010	mg/Kg wet	0.0200		97.7	70-130			
2-Chlorotoluene	0.0198	0.0020	mg/Kg wet	0.0200		98.9	70-130			
4-Chlorotoluene	0.0199	0.0020	mg/Kg wet	0.0200		99.7	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0217	0.0020	mg/Kg wet	0.0200		108	70-130			
1,2-Dibromoethane (EDB)	0.0211	0.0010	mg/Kg wet	0.0200		105	70-130			
Dibromomethane	0.0211	0.0020	mg/Kg wet	0.0200		105	70-130			
1,2-Dichlorobenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.5	70-130			
1,3-Dichlorobenzene	0.0199	0.0020	mg/Kg wet	0.0200		99.3	70-130			
1,4-Dichlorobenzene	0.0195	0.0020	mg/Kg wet	0.0200		97.3	70-130			
trans-1,4-Dichloro-2-butene	0.0186	0.0040	mg/Kg wet	0.0200		93.2	70-130			
Dichlorodifluoromethane (Freon 12)	0.0196	0.020	mg/Kg wet	0.0200		98.1	70-130			
1,1-Dichloroethane	0.0218	0.0020	mg/Kg wet	0.0200		109	70-130			
1,2-Dichloroethane	0.0211	0.0020	mg/Kg wet	0.0200		106	70-130			
1,1-Dichloroethylene	0.0209	0.0040	mg/Kg wet	0.0200		104	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B108745 - SW-846 5035										
LCS (B108745-BS1)				Prepared & Analyzed: 11/03/14						
cis-1,2-Dichloroethylene	0.0213	0.0020	mg/Kg wet	0.0200		107	70-130			
trans-1,2-Dichloroethylene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
1,2-Dichloropropane	0.0213	0.0020	mg/Kg wet	0.0200		106	70-130			
1,3-Dichloropropane	0.0209	0.0010	mg/Kg wet	0.0200		104	70-130			
2,2-Dichloropropane	0.0209	0.0020	mg/Kg wet	0.0200		105	70-130			
1,1-Dichloropropene	0.0205	0.0020	mg/Kg wet	0.0200		102	70-130			
cis-1,3-Dichloropropene	0.0196	0.0010	mg/Kg wet	0.0200		98.1	70-130			
trans-1,3-Dichloropropene	0.0188	0.0010	mg/Kg wet	0.0200		94.2	70-130			
Ethylbenzene	0.0202	0.0020	mg/Kg wet	0.0200		101	70-130			
Hexachlorobutadiene	0.0190	0.0020	mg/Kg wet	0.0200		95.0	70-130			
2-Hexanone (MBK)	0.208	0.020	mg/Kg wet	0.200		104	70-130			
Isopropylbenzene (Cumene)	0.0185	0.0020	mg/Kg wet	0.0200		92.5	70-130			
p-Isopropyltoluene (p-Cymene)	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
Methyl tert-Butyl Ether (MTBE)	0.0225	0.0040	mg/Kg wet	0.0200		112	70-130			
Methylene Chloride	0.0198	0.020	mg/Kg wet	0.0200		99.0	70-130			
4-Methyl-2-pentanone (MIBK)	0.220	0.020	mg/Kg wet	0.200		110	70-130			
Naphthalene	0.0179	0.0040	mg/Kg wet	0.0200		89.4	70-130			
n-Propylbenzene	0.0188	0.0040	mg/Kg wet	0.0200		93.8	70-130			
Styrene	0.0207	0.0020	mg/Kg wet	0.0200		103	70-130			
1,1,1,2-Tetrachloroethane	0.0193	0.0020	mg/Kg wet	0.0200		96.4	70-130			
1,1,2,2-Tetrachloroethane	0.0209	0.0010	mg/Kg wet	0.0200		104	70-130			
Tetrachloroethylene	0.0189	0.0020	mg/Kg wet	0.0200		94.3	70-130			
Tetrahydrofuran	0.0220	0.010	mg/Kg wet	0.0200		110	70-130			
Toluene	0.0188	0.0020	mg/Kg wet	0.0200		94.2	70-130			
1,2,3-Trichlorobenzene	0.0184	0.0020	mg/Kg wet	0.0200		91.8	70-130			
1,2,4-Trichlorobenzene	0.0176	0.0020	mg/Kg wet	0.0200		87.8	70-130			
1,1,1-Trichloroethane	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130			
1,1,2-Trichloroethane	0.0207	0.0020	mg/Kg wet	0.0200		104	70-130			
Trichloroethylene	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130			
Trichlorofluoromethane (Freon 11)	0.0204	0.010	mg/Kg wet	0.0200		102	70-130			
1,2,3-Trichloropropane	0.0210	0.0020	mg/Kg wet	0.0200		105	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0207	0.010	mg/Kg wet	0.0200		104	70-130			
1,2,4-Trimethylbenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130			
1,3,5-Trimethylbenzene	0.0181	0.0020	mg/Kg wet	0.0200		90.6	70-130			
Vinyl Chloride	0.0205	0.010	mg/Kg wet	0.0200		103	70-130			
m+p Xylene	0.0371	0.0040	mg/Kg wet	0.0400		92.6	70-130			
o-Xylene	0.0201	0.0020	mg/Kg wet	0.0200		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.0509		mg/Kg wet	0.0500		102	70-130			
Surrogate: Toluene-d8	0.0495		mg/Kg wet	0.0500		99.0	70-130			
Surrogate: 4-Bromofluorobenzene	0.0502		mg/Kg wet	0.0500		100	70-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B108426 - SW-846 3546

Blank (B108426-BLK1)

Prepared & Analyzed: 10/30/14

Acenaphthene	ND	0.17	mg/Kg wet
Acenaphthylene	ND	0.17	mg/Kg wet
Aniline	ND	0.34	mg/Kg wet
Anthracene	ND	0.17	mg/Kg wet
Benzo(a)anthracene	ND	0.17	mg/Kg wet
Benzo(a)pyrene	ND	0.17	mg/Kg wet
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet
4-Bromophenylphenylether	ND	0.34	mg/Kg wet
Butylbenzylphthalate	ND	0.34	mg/Kg wet
Carbazole	ND	0.17	mg/Kg wet
4-Chloroaniline	ND	0.66	mg/Kg wet
4-Chloro-3-methylphenol	ND	0.66	mg/Kg wet
2-Chloronaphthalene	ND	0.34	mg/Kg wet
2-Chlorophenol	ND	0.34	mg/Kg wet
4-Chlorophenylphenylether	ND	0.34	mg/Kg wet
Chrysene	ND	0.17	mg/Kg wet
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet
Dibenzofuran	ND	0.34	mg/Kg wet
Di-n-butylphthalate	ND	0.34	mg/Kg wet
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet
2,4-Dichlorophenol	ND	0.34	mg/Kg wet
Diethylphthalate	ND	0.34	mg/Kg wet
2,4-Dimethylphenol	ND	0.34	mg/Kg wet
Dimethylphthalate	ND	0.34	mg/Kg wet
4,6-Dinitro-2-methylphenol	ND	0.34	mg/Kg wet
2,4-Dinitrophenol	ND	0.66	mg/Kg wet
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet
Di-n-octylphthalate	ND	0.67	mg/Kg wet
Fluoranthene	ND	0.17	mg/Kg wet
Fluorene	ND	0.17	mg/Kg wet
Hexachlorobenzene	ND	0.34	mg/Kg wet
Hexachlorobutadiene	ND	0.34	mg/Kg wet
Hexachlorocyclopentadiene	ND	0.34	mg/Kg wet
Hexachloroethane	ND	0.34	mg/Kg wet
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet
Isophorone	ND	0.34	mg/Kg wet
2-Methylnaphthalene	ND	0.17	mg/Kg wet
2-Methylphenol	ND	0.34	mg/Kg wet
3/4-Methylphenol	ND	0.34	mg/Kg wet
Naphthalene	ND	0.17	mg/Kg wet
2-Nitroaniline	ND	0.34	mg/Kg wet
3-Nitroaniline	ND	0.34	mg/Kg wet
4-Nitroaniline	ND	0.34	mg/Kg wet
Nitrobenzene	ND	0.34	mg/Kg wet
2-Nitrophenol	ND	0.34	mg/Kg wet

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B108426 - SW-846 3546										
Blank (B108426-BLK1)				Prepared & Analyzed: 10/30/14						
4-Nitrophenol	ND	0.66	mg/Kg wet							V-20
N-Nitrosodiphenylamine	ND	0.34	mg/Kg wet							
N-Nitrosodi-n-propylamine	ND	0.34	mg/Kg wet							
Pentachloronitrobenzene	ND	0.34	mg/Kg wet							V-16
Pentachlorophenol	ND	0.34	mg/Kg wet							
Phenanthrene	ND	0.17	mg/Kg wet							
Phenol	ND	0.34	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
Pyridine	ND	0.34	mg/Kg wet							
1,2,4,5-Tetrachlorobenzene	ND	0.34	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.34	mg/Kg wet							
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
Surrogate: 2-Fluorophenol	5.89		mg/Kg wet	6.67		88.4	30-130			
Surrogate: Phenol-d6	6.34		mg/Kg wet	6.67		95.1	30-130			
Surrogate: Nitrobenzene-d5	2.89		mg/Kg wet	3.33		86.7	30-130			
Surrogate: 2-Fluorobiphenyl	3.25		mg/Kg wet	3.33		97.4	30-130			
Surrogate: 2,4,6-Tribromophenol	7.13		mg/Kg wet	6.67		107	30-130			
Surrogate: p-Terphenyl-d14	3.80		mg/Kg wet	3.33		114	30-130			
LCS (B108426-BS1)				Prepared & Analyzed: 10/30/14						
Acenaphthene	1.22	0.17	mg/Kg wet	1.67		73.5	40-140			
Acenaphthylene	1.24	0.17	mg/Kg wet	1.67		74.2	40-140			
Aniline	0.718	0.34	mg/Kg wet	1.67		43.1	40-140			†
Anthracene	1.30	0.17	mg/Kg wet	1.67		78.3	40-140			
Benzo(a)anthracene	1.32	0.17	mg/Kg wet	1.67		79.5	40-140			
Benzo(a)pyrene	1.33	0.17	mg/Kg wet	1.67		80.1	40-140			
Benzo(b)fluoranthene	1.35	0.17	mg/Kg wet	1.67		81.0	40-140			
Benzo(g,h,i)perylene	1.50	0.17	mg/Kg wet	1.67		90.2	40-140			
Benzo(k)fluoranthene	1.33	0.17	mg/Kg wet	1.67		79.8	40-140			
Bis(2-chloroethoxy)methane	1.18	0.34	mg/Kg wet	1.67		70.5	40-140			
Bis(2-chloroethyl)ether	1.13	0.34	mg/Kg wet	1.67		67.8	40-140			
Bis(2-chloroisopropyl)ether	1.17	0.34	mg/Kg wet	1.67		70.2	40-140			
Bis(2-Ethylhexyl)phthalate	1.50	0.34	mg/Kg wet	1.67		90.1	40-140			
4-Bromophenylphenylether	1.23	0.34	mg/Kg wet	1.67		73.7	40-140			
Butylbenzylphthalate	1.45	0.34	mg/Kg wet	1.67		86.7	40-140			
Carbazole	1.35	0.17	mg/Kg wet	1.67		80.8	40-140			
4-Chloroaniline	0.715	0.66	mg/Kg wet	1.67		42.9	40-140			†
4-Chloro-3-methylphenol	1.27	0.66	mg/Kg wet	1.67		76.3	30-130			
2-Chloronaphthalene	1.08	0.34	mg/Kg wet	1.67		65.0	40-140			
2-Chlorophenol	1.12	0.34	mg/Kg wet	1.67		67.3	30-130			
4-Chlorophenylphenylether	1.22	0.34	mg/Kg wet	1.67		73.3	40-140			
Chrysene	1.34	0.17	mg/Kg wet	1.67		80.2	40-140			
Dibenz(a,h)anthracene	1.47	0.17	mg/Kg wet	1.67		88.3	40-140			
Dibenzofuran	1.33	0.34	mg/Kg wet	1.67		79.6	40-140			
Di-n-butylphthalate	1.34	0.34	mg/Kg wet	1.67		80.4	40-140			
3,3-Dichlorobenzidine	0.877	0.17	mg/Kg wet	1.67		52.6	40-140			†
2,4-Dichlorophenol	1.20	0.34	mg/Kg wet	1.67		71.9	30-130			
Diethylphthalate	1.32	0.34	mg/Kg wet	1.67		79.4	40-140			
2,4-Dimethylphenol	1.19	0.34	mg/Kg wet	1.67		71.4	30-130			
Dimethylphthalate	1.33	0.34	mg/Kg wet	1.67		79.7	40-140			
4,6-Dinitro-2-methylphenol	0.946	0.34	mg/Kg wet	1.67		56.8	30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B108426 - SW-846 3546										
LCS (B108426-BS1)				Prepared & Analyzed: 10/30/14						
2,4-Dinitrophenol	0.713	0.66	mg/Kg wet	1.67		42.8	30-130			
2,4-Dinitrotoluene	1.37	0.34	mg/Kg wet	1.67		82.1	40-140			
2,6-Dinitrotoluene	1.38	0.34	mg/Kg wet	1.67		82.6	40-140			
Di-n-octylphthalate	1.69	0.67	mg/Kg wet	1.67		101	40-140			
Fluoranthene	1.33	0.17	mg/Kg wet	1.67		79.9	40-140			
Fluorene	1.28	0.17	mg/Kg wet	1.67		77.0	40-140			
Hexachlorobenzene	1.32	0.34	mg/Kg wet	1.67		79.2	40-140			
Hexachlorobutadiene	1.08	0.34	mg/Kg wet	1.67		64.5	40-140			
Hexachlorocyclopentadiene	0.916	0.34	mg/Kg wet	1.67		55.0	30-140			
Hexachloroethane	1.06	0.34	mg/Kg wet	1.67		63.8	40-140			
Indeno(1,2,3-cd)pyrene	1.49	0.17	mg/Kg wet	1.67		89.6	40-140			
Isophorone	1.29	0.34	mg/Kg wet	1.67		77.4	40-140			
2-Methylnaphthalene	1.20	0.17	mg/Kg wet	1.67		71.7	40-140			
2-Methylphenol	1.09	0.34	mg/Kg wet	1.67		65.2	30-130			
3/4-Methylphenol	1.24	0.34	mg/Kg wet	1.67		74.5	30-130			
Naphthalene	1.08	0.17	mg/Kg wet	1.67		65.1	40-140			
2-Nitroaniline	1.54	0.34	mg/Kg wet	1.67		92.3	40-140			
3-Nitroaniline	1.25	0.34	mg/Kg wet	1.67		74.8	40-140			†
4-Nitroaniline	1.38	0.34	mg/Kg wet	1.67		82.9	40-140			
Nitrobenzene	1.19	0.34	mg/Kg wet	1.67		71.3	40-140			
2-Nitrophenol	1.15	0.34	mg/Kg wet	1.67		69.2	30-130			
4-Nitrophenol	1.56	0.66	mg/Kg wet	1.67		93.4	10-130			V-06
N-Nitrosodiphenylamine	1.63	0.34	mg/Kg wet	1.67		97.9	40-140			
N-Nitrosodi-n-propylamine	1.22	0.34	mg/Kg wet	1.67		73.0	40-140			
Pentachloronitrobenzene	1.38	0.34	mg/Kg wet	1.67		83.1	40-140			V-16
Pentachlorophenol	1.23	0.34	mg/Kg wet	1.67		73.7	30-130			
Phenanthrene	1.32	0.17	mg/Kg wet	1.67		79.5	40-140			
Phenol	1.19	0.34	mg/Kg wet	1.67		71.5	20-130			
Pyrene	1.35	0.17	mg/Kg wet	1.67		81.0	40-140			
Pyridine	0.767	0.34	mg/Kg wet	1.67		46.0	10-140			†
1,2,4,5-Tetrachlorobenzene	1.19	0.34	mg/Kg wet	1.67		71.3	40-140			
1,2,4-Trichlorobenzene	1.08	0.34	mg/Kg wet	1.67		64.9	40-140			
2,4,5-Trichlorophenol	1.23	0.34	mg/Kg wet	1.67		73.8	30-130			
2,4,6-Trichlorophenol	1.28	0.34	mg/Kg wet	1.67		76.8	30-130			
Surrogate: 2-Fluorophenol	4.74		mg/Kg wet	6.67		71.0	30-130			
Surrogate: Phenol-d6	5.05		mg/Kg wet	6.67		75.8	30-130			
Surrogate: Nitrobenzene-d5	2.44		mg/Kg wet	3.33		73.1	30-130			
Surrogate: 2-Fluorobiphenyl	2.65		mg/Kg wet	3.33		79.5	30-130			
Surrogate: 2,4,6-Tribromophenol	6.13		mg/Kg wet	6.67		91.9	30-130			
Surrogate: p-Terphenyl-d14	2.88		mg/Kg wet	3.33		86.5	30-130			
LCS Dup (B108426-BS1)				Prepared & Analyzed: 10/30/14						
Acenaphthene	1.37	0.17	mg/Kg wet	1.67		82.0	40-140	10.9	30	
Acenaphthylene	1.38	0.17	mg/Kg wet	1.67		82.7	40-140	10.9	30	
Aniline	0.663	0.34	mg/Kg wet	1.67		39.8	* 40-140	7.92	50	L-07 † ‡
Anthracene	1.49	0.17	mg/Kg wet	1.67		89.3	40-140	13.2	30	
Benzo(a)anthracene	1.52	0.17	mg/Kg wet	1.67		91.1	40-140	13.6	30	
Benzo(a)pyrene	1.52	0.17	mg/Kg wet	1.67		91.2	40-140	13.0	30	
Benzo(b)fluoranthene	1.57	0.17	mg/Kg wet	1.67		94.5	40-140	15.4	30	
Benzo(g,h,i)perylene	1.70	0.17	mg/Kg wet	1.67		102	40-140	12.3	30	
Benzo(k)fluoranthene	1.56	0.17	mg/Kg wet	1.67		93.5	40-140	15.9	30	
Bis(2-chloroethoxy)methane	1.21	0.34	mg/Kg wet	1.67		72.5	40-140	2.74	30	

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B108426 - SW-846 3546										
LCS Dup (B108426-BSD1)				Prepared & Analyzed: 10/30/14						
Bis(2-chloroethyl)ether	0.915	0.34	mg/Kg wet	1.67		54.9	40-140	21.0	30	
Bis(2-chloroisopropyl)ether	0.971	0.34	mg/Kg wet	1.67		58.3	40-140	18.5	30	
Bis(2-Ethylhexyl)phthalate	1.73	0.34	mg/Kg wet	1.67		104	40-140	14.0	30	
4-Bromophenylphenylether	1.41	0.34	mg/Kg wet	1.67		84.5	40-140	13.6	30	
Butylbenzylphthalate	1.59	0.34	mg/Kg wet	1.67		95.5	40-140	9.57	30	
Carbazole	1.56	0.17	mg/Kg wet	1.67		93.6	40-140	14.6	30	
4-Chloroaniline	0.635	0.66	mg/Kg wet	1.67		38.1	* 40-140	11.9	30	L-07 †
4-Chloro-3-methylphenol	1.41	0.66	mg/Kg wet	1.67		84.6	30-130	10.3	30	
2-Chloronaphthalene	1.19	0.34	mg/Kg wet	1.67		71.6	40-140	9.60	30	
2-Chlorophenol	1.03	0.34	mg/Kg wet	1.67		61.7	30-130	8.65	30	
4-Chlorophenylphenylether	1.39	0.34	mg/Kg wet	1.67		83.1	40-140	12.6	30	
Chrysene	1.54	0.17	mg/Kg wet	1.67		92.1	40-140	13.8	30	
Dibenz(a,h)anthracene	1.68	0.17	mg/Kg wet	1.67		101	40-140	13.0	30	
Dibenzofuran	1.49	0.34	mg/Kg wet	1.67		89.5	40-140	11.7	30	
Di-n-butylphthalate	1.52	0.34	mg/Kg wet	1.67		91.1	40-140	12.5	30	
3,3-Dichlorobenzidine	0.872	0.17	mg/Kg wet	1.67		52.3	40-140	0.572	30	† ‡
2,4-Dichlorophenol	1.31	0.34	mg/Kg wet	1.67		78.8	30-130	9.15	30	
Diethylphthalate	1.51	0.34	mg/Kg wet	1.67		90.6	40-140	13.2	30	
2,4-Dimethylphenol	1.28	0.34	mg/Kg wet	1.67		76.9	30-130	7.53	30	
Dimethylphthalate	1.49	0.34	mg/Kg wet	1.67		89.3	40-140	11.4	50	
4,6-Dinitro-2-methylphenol	1.09	0.34	mg/Kg wet	1.67		65.7	30-130	14.5	50	
2,4-Dinitrophenol	0.749	0.66	mg/Kg wet	1.67		44.9	30-130	4.93	50	
2,4-Dinitrotoluene	1.59	0.34	mg/Kg wet	1.67		95.2	40-140	14.8	30	
2,6-Dinitrotoluene	1.58	0.34	mg/Kg wet	1.67		94.7	40-140	13.7	30	
Di-n-octylphthalate	1.96	0.67	mg/Kg wet	1.67		118	40-140	15.3	30	
Fluoranthene	1.55	0.17	mg/Kg wet	1.67		93.3	40-140	15.5	30	
Fluorene	1.46	0.17	mg/Kg wet	1.67		87.7	40-140	12.9	30	
Hexachlorobenzene	1.49	0.34	mg/Kg wet	1.67		89.5	40-140	12.2	30	
Hexachlorobutadiene	0.919	0.34	mg/Kg wet	1.67		55.1	40-140	15.7	30	
Hexachlorocyclopentadiene	0.908	0.34	mg/Kg wet	1.67		54.5	30-140	0.950	50	
Hexachloroethane	0.757	0.34	mg/Kg wet	1.67		45.4	40-140	33.7	50	
Indeno(1,2,3-cd)pyrene	1.67	0.17	mg/Kg wet	1.67		100	40-140	11.1	50	
Isophorone	1.32	0.34	mg/Kg wet	1.67		78.9	40-140	1.87	30	
2-Methylnaphthalene	1.24	0.17	mg/Kg wet	1.67		74.3	40-140	3.51	30	
2-Methylphenol	1.11	0.34	mg/Kg wet	1.67		66.9	30-130	2.54	30	
3/4-Methylphenol	1.31	0.34	mg/Kg wet	1.67		78.5	30-130	5.26	30	
Naphthalene	1.02	0.17	mg/Kg wet	1.67		60.9	40-140	6.60	30	
2-Nitroaniline	1.69	0.34	mg/Kg wet	1.67		102	40-140	9.47	30	
3-Nitroaniline	1.23	0.34	mg/Kg wet	1.67		73.7	40-140	1.48	30	†
4-Nitroaniline	1.59	0.34	mg/Kg wet	1.67		95.5	40-140	14.1	30	
Nitrobenzene	1.08	0.34	mg/Kg wet	1.67		64.9	40-140	9.31	30	
2-Nitrophenol	1.11	0.34	mg/Kg wet	1.67		66.5	30-130	3.92	30	
4-Nitrophenol	1.81	0.66	mg/Kg wet	1.67		109	10-130	15.3	50	V-06 ‡
N-Nitrosodiphenylamine	1.85	0.34	mg/Kg wet	1.67		111	40-140	12.4	30	
N-Nitrosodi-n-propylamine	1.18	0.34	mg/Kg wet	1.67		70.6	40-140	3.32	30	
Pentachloronitrobenzene	1.56	0.34	mg/Kg wet	1.67		93.7	40-140	12.1	30	V-16
Pentachlorophenol	1.43	0.34	mg/Kg wet	1.67		86.1	30-130	15.4	50	
Phenanthrene	1.51	0.17	mg/Kg wet	1.67		90.3	40-140	12.8	30	
Phenol	1.18	0.34	mg/Kg wet	1.67		70.5	20-130	1.41	30	
Pyrene	1.51	0.17	mg/Kg wet	1.67		90.4	40-140	11.0	30	
Pyridine	0.482	0.34	mg/Kg wet	1.67		28.9	10-140	45.7	50	†
1,2,4,5-Tetrachlorobenzene	1.25	0.34	mg/Kg wet	1.67		74.7	40-140	4.66	30	

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B108426 - SW-846 3546

LCS Dup (B108426-BSD1)

Prepared & Analyzed: 10/30/14

1,2,4-Trichlorobenzene	0.946	0.34	mg/Kg wet	1.67		56.8	40-140	13.4	30	
2,4,5-Trichlorophenol	1.40	0.34	mg/Kg wet	1.67		84.2	30-130	13.1	30	
2,4,6-Trichlorophenol	1.45	0.34	mg/Kg wet	1.67		87.0	30-130	12.5	50	
Surrogate: 2-Fluorophenol	4.01		mg/Kg wet	6.67		60.1	30-130			
Surrogate: Phenol-d6	4.99		mg/Kg wet	6.67		74.9	30-130			
Surrogate: Nitrobenzene-d5	2.20		mg/Kg wet	3.33		66.1	30-130			
Surrogate: 2-Fluorobiphenyl	2.90		mg/Kg wet	3.33		86.9	30-130			
Surrogate: 2,4,6-Tribromophenol	7.09		mg/Kg wet	6.67		106	30-130			
Surrogate: p-Terphenyl-d14	3.22		mg/Kg wet	3.33		96.7	30-130			

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QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B108415 - SW-846 3546

Blank (B108415-BLK1)

Prepared: 10/29/14 Analyzed: 10/31/14

alpha-Chlordane	ND	0.0050	mg/Kg wet							
alpha-Chlordane [2C]	ND	0.0050	mg/Kg wet							
gamma-Chlordane	ND	0.0050	mg/Kg wet							
gamma-Chlordane [2C]	ND	0.0050	mg/Kg wet							
Alachlor	ND	0.020	mg/Kg wet							
Alachlor [2C]	ND	0.020	mg/Kg wet							
Aldrin	ND	0.0050	mg/Kg wet							
Aldrin [2C]	ND	0.0050	mg/Kg wet							
alpha-BHC	ND	0.0050	mg/Kg wet							
alpha-BHC [2C]	ND	0.0050	mg/Kg wet							
beta-BHC	ND	0.0050	mg/Kg wet							
beta-BHC [2C]	ND	0.0050	mg/Kg wet							
delta-BHC	ND	0.0050	mg/Kg wet							
delta-BHC [2C]	ND	0.0050	mg/Kg wet							
gamma-BHC (Lindane)	ND	0.0020	mg/Kg wet							
gamma-BHC (Lindane) [2C]	ND	0.0020	mg/Kg wet							
Chlordane	ND	0.020	mg/Kg wet							
Chlordane [2C]	ND	0.020	mg/Kg wet							
4,4'-DDD	ND	0.0040	mg/Kg wet							
4,4'-DDD [2C]	ND	0.0040	mg/Kg wet							
4,4'-DDE	ND	0.0040	mg/Kg wet							
4,4'-DDE [2C]	ND	0.0040	mg/Kg wet							
4,4'-DDT	ND	0.0040	mg/Kg wet							
4,4'-DDT [2C]	ND	0.0040	mg/Kg wet							
Dieldrin	ND	0.0040	mg/Kg wet							
Dieldrin [2C]	ND	0.0040	mg/Kg wet							
Endosulfan I	ND	0.0050	mg/Kg wet							
Endosulfan I [2C]	ND	0.0050	mg/Kg wet							
Endosulfan II	ND	0.0080	mg/Kg wet							
Endosulfan II [2C]	ND	0.0080	mg/Kg wet							
Endosulfan Sulfate	ND	0.0080	mg/Kg wet							
Endosulfan Sulfate [2C]	ND	0.0080	mg/Kg wet							
Endrin	ND	0.0080	mg/Kg wet							
Endrin [2C]	ND	0.0080	mg/Kg wet							
Endrin Aldehyde	ND	0.0080	mg/Kg wet							
Endrin Aldehyde [2C]	ND	0.0080	mg/Kg wet							
Endrin Ketone	ND	0.0080	mg/Kg wet							
Endrin Ketone [2C]	ND	0.0080	mg/Kg wet							
Heptachlor	ND	0.0050	mg/Kg wet							
Heptachlor [2C]	ND	0.0050	mg/Kg wet							
Heptachlor Epoxide	ND	0.0050	mg/Kg wet							
Heptachlor Epoxide [2C]	ND	0.0050	mg/Kg wet							
Hexachlorobenzene	ND	0.0060	mg/Kg wet							
Hexachlorobenzene [2C]	ND	0.0060	mg/Kg wet							
Methoxychlor	ND	0.050	mg/Kg wet							
Methoxychlor [2C]	ND	0.050	mg/Kg wet							
Toxaphene	ND	0.10	mg/Kg wet							
Toxaphene [2C]	ND	0.10	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.250		mg/Kg wet	0.200		125	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.233		mg/Kg wet	0.200		117	30-150			
Surrogate: Tetrachloro-m-xylene	0.190		mg/Kg wet	0.200		95.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.193		mg/Kg wet	0.200		96.5	30-150			

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QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B108415 - SW-846 3546										
LCS (B108415-BS1)				Prepared: 10/29/14 Analyzed: 10/31/14						
Alachlor	0.086	0.020	mg/Kg wet	0.100		86.4	40-140			
Alachlor [2C]	0.072	0.020	mg/Kg wet	0.100		71.6	40-140			
Aldrin	0.083	0.0050	mg/Kg wet	0.100		83.2	40-140			
Aldrin [2C]	0.088	0.0050	mg/Kg wet	0.100		87.6	40-140			
alpha-BHC	0.079	0.0050	mg/Kg wet	0.100		78.6	40-140			V-06
alpha-BHC [2C]	0.079	0.0050	mg/Kg wet	0.100		79.4	40-140			
beta-BHC	0.075	0.0050	mg/Kg wet	0.100		74.7	40-140			
beta-BHC [2C]	0.077	0.0050	mg/Kg wet	0.100		77.5	40-140			
delta-BHC	0.066	0.0050	mg/Kg wet	0.100		66.2	40-140			
delta-BHC [2C]	0.068	0.0050	mg/Kg wet	0.100		68.0	40-140			
gamma-BHC (Lindane)	0.081	0.0020	mg/Kg wet	0.100		80.8	40-140			V-06
gamma-BHC (Lindane) [2C]	0.081	0.0020	mg/Kg wet	0.100		81.4	40-140			
4,4'-DDD	0.087	0.0040	mg/Kg wet	0.100		86.8	40-140			
4,4'-DDD [2C]	0.091	0.0040	mg/Kg wet	0.100		90.8	40-140			
4,4'-DDE	0.086	0.0040	mg/Kg wet	0.100		85.7	40-140			
4,4'-DDE [2C]	0.090	0.0040	mg/Kg wet	0.100		90.1	40-140			
4,4'-DDT	0.080	0.0040	mg/Kg wet	0.100		80.2	40-140			
4,4'-DDT [2C]	0.081	0.0040	mg/Kg wet	0.100		81.2	40-140			
Dieldrin	0.079	0.0040	mg/Kg wet	0.100		78.8	40-140			
Dieldrin [2C]	0.087	0.0040	mg/Kg wet	0.100		87.5	40-140			
Endosulfan I	0.078	0.0050	mg/Kg wet	0.100		78.4	40-140			
Endosulfan I [2C]	0.081	0.0050	mg/Kg wet	0.100		80.8	40-140			
Endosulfan II	0.080	0.0080	mg/Kg wet	0.100		80.4	40-140			
Endosulfan II [2C]	0.083	0.0080	mg/Kg wet	0.100		82.5	40-140			
Endosulfan Sulfate	0.077	0.0080	mg/Kg wet	0.100		77.3	40-140			
Endosulfan Sulfate [2C]	0.078	0.0080	mg/Kg wet	0.100		78.1	40-140			
Endrin	0.080	0.0080	mg/Kg wet	0.100		80.2	40-140			
Endrin [2C]	0.083	0.0080	mg/Kg wet	0.100		83.3	40-140			
Endrin Aldehyde	0.081	0.0080	mg/Kg wet	0.100		81.5	40-140			
Endrin Aldehyde [2C]	0.082	0.0080	mg/Kg wet	0.100		82.4	40-140			
Endrin Ketone	0.077	0.0080	mg/Kg wet	0.100		77.1	40-140			
Endrin Ketone [2C]	0.083	0.0080	mg/Kg wet	0.100		82.7	40-140			
Heptachlor	0.056	0.0050	mg/Kg wet	0.100		55.5	40-140			
Heptachlor [2C]	0.081	0.0050	mg/Kg wet	0.100		81.0	40-140			
Heptachlor Epoxide	0.080	0.0050	mg/Kg wet	0.100		79.7	40-140			
Heptachlor Epoxide [2C]	0.083	0.0050	mg/Kg wet	0.100		82.9	40-140			
Hexachlorobenzene	0.093	0.0060	mg/Kg wet	0.100		93.2	40-140			
Hexachlorobenzene [2C]	0.085	0.0060	mg/Kg wet	0.100		85.2	40-140			
Methoxychlor	0.073	0.050	mg/Kg wet	0.100		73.3	40-140			
Methoxychlor [2C]	0.080	0.050	mg/Kg wet	0.100		79.7	40-140			
Surrogate: Decachlorobiphenyl	0.199		mg/Kg wet	0.200		99.5	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.191		mg/Kg wet	0.200		95.3	30-150			
Surrogate: Tetrachloro-m-xylene	0.169		mg/Kg wet	0.200		84.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.162		mg/Kg wet	0.200		80.9	30-150			

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QUALITY CONTROL

Organochloride Pesticides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B108415 - SW-846 3546										
LCS Dup (B108415-BSD1)					Prepared: 10/29/14 Analyzed: 10/31/14					
Alachlor	0.082	0.020	mg/Kg wet	0.100		81.6	40-140	5.70	30	
Alachlor [2C]	0.070	0.020	mg/Kg wet	0.100		70.2	40-140	2.01	30	
Aldrin	0.082	0.0050	mg/Kg wet	0.100		82.5	40-140	0.937	30	
Aldrin [2C]	0.087	0.0050	mg/Kg wet	0.100		87.1	40-140	0.566	30	
alpha-BHC	0.079	0.0050	mg/Kg wet	0.100		78.6	40-140	0.0293	30	V-06
alpha-BHC [2C]	0.077	0.0050	mg/Kg wet	0.100		77.1	40-140	2.88	30	
beta-BHC	0.074	0.0050	mg/Kg wet	0.100		74.4	40-140	0.529	30	
beta-BHC [2C]	0.078	0.0050	mg/Kg wet	0.100		77.6	40-140	0.150	30	
delta-BHC	0.072	0.0050	mg/Kg wet	0.100		71.6	40-140	7.91	30	
delta-BHC [2C]	0.074	0.0050	mg/Kg wet	0.100		73.8	40-140	8.22	30	
gamma-BHC (Lindane)	0.078	0.0020	mg/Kg wet	0.100		78.4	40-140	2.98	30	V-06
gamma-BHC (Lindane) [2C]	0.079	0.0020	mg/Kg wet	0.100		79.2	40-140	2.79	30	
4,4'-DDD	0.091	0.0040	mg/Kg wet	0.100		90.6	40-140	4.23	30	
4,4'-DDD [2C]	0.095	0.0040	mg/Kg wet	0.100		94.6	40-140	4.07	30	
4,4'-DDE	0.088	0.0040	mg/Kg wet	0.100		87.9	40-140	2.56	30	
4,4'-DDE [2C]	0.093	0.0040	mg/Kg wet	0.100		93.2	40-140	3.38	30	
4,4'-DDT	0.084	0.0040	mg/Kg wet	0.100		83.6	40-140	4.06	30	
4,4'-DDT [2C]	0.084	0.0040	mg/Kg wet	0.100		84.3	40-140	3.78	30	
Dieldrin	0.080	0.0040	mg/Kg wet	0.100		80.3	40-140	1.86	30	
Dieldrin [2C]	0.089	0.0040	mg/Kg wet	0.100		89.2	40-140	1.90	30	
Endosulfan I	0.080	0.0050	mg/Kg wet	0.100		80.4	40-140	2.56	30	
Endosulfan I [2C]	0.083	0.0050	mg/Kg wet	0.100		83.1	40-140	2.86	30	
Endosulfan II	0.083	0.0080	mg/Kg wet	0.100		83.0	40-140	3.20	30	
Endosulfan II [2C]	0.086	0.0080	mg/Kg wet	0.100		85.7	40-140	3.71	30	
Endosulfan Sulfate	0.078	0.0080	mg/Kg wet	0.100		77.7	40-140	0.461	30	
Endosulfan Sulfate [2C]	0.078	0.0080	mg/Kg wet	0.100		78.3	40-140	0.262	30	
Endrin	0.082	0.0080	mg/Kg wet	0.100		81.7	40-140	1.75	30	
Endrin [2C]	0.085	0.0080	mg/Kg wet	0.100		85.0	40-140	2.05	30	
Endrin Aldehyde	0.084	0.0080	mg/Kg wet	0.100		84.1	40-140	3.18	30	
Endrin Aldehyde [2C]	0.085	0.0080	mg/Kg wet	0.100		85.1	40-140	3.21	30	
Endrin Ketone	0.077	0.0080	mg/Kg wet	0.100		77.0	40-140	0.152	30	
Endrin Ketone [2C]	0.081	0.0080	mg/Kg wet	0.100		81.0	40-140	2.08	30	
Heptachlor	0.054	0.0050	mg/Kg wet	0.100		54.4	40-140	2.00	30	
Heptachlor [2C]	0.080	0.0050	mg/Kg wet	0.100		80.1	40-140	1.04	30	
Heptachlor Epoxide	0.080	0.0050	mg/Kg wet	0.100		80.1	40-140	0.514	30	
Heptachlor Epoxide [2C]	0.083	0.0050	mg/Kg wet	0.100		83.4	40-140	0.645	30	
Hexachlorobenzene	0.090	0.0060	mg/Kg wet	0.100		89.6	40-140	3.91	30	
Hexachlorobenzene [2C]	0.083	0.0060	mg/Kg wet	0.100		82.8	40-140	2.83	30	
Methoxychlor	0.076	0.050	mg/Kg wet	0.100		75.6	40-140	3.05	30	
Methoxychlor [2C]	0.082	0.050	mg/Kg wet	0.100		82.3	40-140	3.23	30	
Surrogate: Decachlorobiphenyl	0.206		mg/Kg wet	0.200		103	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.199		mg/Kg wet	0.200		99.3	30-150			
Surrogate: Tetrachloro-m-xylene	0.162		mg/Kg wet	0.200		80.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.155		mg/Kg wet	0.200		77.5	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B108416 - SW-846 3546

Blank (B108416-BLK1)

Prepared: 10/29/14 Analyzed: 10/30/14

Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	0.213		mg/Kg wet	0.200		107	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.237		mg/Kg wet	0.200		118	30-150			
Surrogate: Tetrachloro-m-xylene	0.180		mg/Kg wet	0.200		90.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.198		mg/Kg wet	0.200		99.1	30-150			

LCS (B108416-BS1)

Prepared: 10/29/14 Analyzed: 10/30/14

Aroclor-1016	0.20	0.10	mg/Kg wet	0.200		98.7	40-140			
Aroclor-1016 [2C]	0.23	0.10	mg/Kg wet	0.200		117	40-140			
Aroclor-1260	0.20	0.10	mg/Kg wet	0.200		102	40-140			
Aroclor-1260 [2C]	0.22	0.10	mg/Kg wet	0.200		108	40-140			
Surrogate: Decachlorobiphenyl	0.232		mg/Kg wet	0.200		116	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.239		mg/Kg wet	0.200		119	30-150			
Surrogate: Tetrachloro-m-xylene	0.203		mg/Kg wet	0.200		101	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.207		mg/Kg wet	0.200		104	30-150			

LCS Dup (B108416-BSD1)

Prepared: 10/29/14 Analyzed: 10/30/14

Aroclor-1016	0.19	0.10	mg/Kg wet	0.200		95.3	40-140	3.48	30	
Aroclor-1016 [2C]	0.23	0.10	mg/Kg wet	0.200		113	40-140	3.44	30	
Aroclor-1260	0.20	0.10	mg/Kg wet	0.200		99.3	40-140	2.29	30	
Aroclor-1260 [2C]	0.21	0.10	mg/Kg wet	0.200		107	40-140	0.654	30	
Surrogate: Decachlorobiphenyl	0.232		mg/Kg wet	0.200		116	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.235		mg/Kg wet	0.200		118	30-150			
Surrogate: Tetrachloro-m-xylene	0.193		mg/Kg wet	0.200		96.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.196		mg/Kg wet	0.200		98.1	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B108416 - SW-846 3546

Matrix Spike (B108416-MS1)

Source: 14J1384-05

Prepared: 10/29/14 Analyzed: 10/30/14

Aroclor-1016	0.22	0.11	mg/Kg dry	0.225	ND	98.0	40-140			
Aroclor-1016 [2C]	0.26	0.11	mg/Kg dry	0.225	ND	113	40-140			
Aroclor-1260	0.22	0.11	mg/Kg dry	0.225	ND	97.0	40-140			
Aroclor-1260 [2C]	0.24	0.11	mg/Kg dry	0.225	ND	106	40-140			
Surrogate: Decachlorobiphenyl	0.250		mg/Kg dry	0.225		111	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.250		mg/Kg dry	0.225		111	30-150			
Surrogate: Tetrachloro-m-xylene	0.222		mg/Kg dry	0.225		98.6	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.224		mg/Kg dry	0.225		99.4	30-150			

Matrix Spike Dup (B108416-MSD1)

Source: 14J1384-05

Prepared: 10/29/14 Analyzed: 10/30/14

Aroclor-1016	0.22	0.11	mg/Kg dry	0.225	ND	96.2	40-140	1.91	30	
Aroclor-1016 [2C]	0.25	0.11	mg/Kg dry	0.225	ND	113	40-140	0.604	30	
Aroclor-1260	0.22	0.11	mg/Kg dry	0.225	ND	95.6	40-140	1.40	30	
Aroclor-1260 [2C]	0.23	0.11	mg/Kg dry	0.225	ND	100	40-140	5.62	30	
Surrogate: Decachlorobiphenyl	0.248		mg/Kg dry	0.225		110	30-150			
Surrogate: Decachlorobiphenyl [2C]	0.247		mg/Kg dry	0.225		110	30-150			
Surrogate: Tetrachloro-m-xylene	0.213		mg/Kg dry	0.225		94.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	0.216		mg/Kg dry	0.225		95.8	30-150			

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QUALITY CONTROL

Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B108457 - SW-846 8151										
Blank (B108457-BLK1)										
Prepared: 10/30/14 Analyzed: 11/03/14										
2,4-D	ND	24	µg/kg wet							
2,4-D [2C]	ND	24	µg/kg wet							
2,4,5-TP (Silvex)	ND	2.4	µg/kg wet							
2,4,5-TP (Silvex) [2C]	ND	2.4	µg/kg wet							
2,4,5-T	ND	2.4	µg/kg wet							
2,4,5-T [2C]	ND	2.4	µg/kg wet							
Dalapon	ND	60	µg/kg wet							
Dalapon [2C]	ND	60	µg/kg wet							
Dicamba	ND	2.4	µg/kg wet							
Dicamba [2C]	ND	2.4	µg/kg wet							
Surrogate: 2,4-Dichlorophenylacetic acid	91.5		µg/kg wet	95.2		96.0	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	75.0		µg/kg wet	95.2		78.7	30-150			
LCS (B108457-BS1)										
Prepared: 10/30/14 Analyzed: 11/03/14										
2,4-D	109	25	µg/kg wet	123		88.9	40-140			
2,4-D [2C]	98.0	25	µg/kg wet	123		79.6	40-140			
2,4,5-TP (Silvex)	11.0	2.5	µg/kg wet	12.3		89.6	40-140			
2,4,5-TP (Silvex) [2C]	9.48	2.5	µg/kg wet	12.3		76.9	40-140			
2,4,5-T	10.2	2.5	µg/kg wet	12.3		82.7	40-140			
2,4,5-T [2C]	10.2	2.5	µg/kg wet	12.3		82.6	40-140			
Dalapon	176	62	µg/kg wet	308		57.3	40-140			
Dalapon [2C]	185	62	µg/kg wet	308		60.0	40-140			
Dicamba	10.4	2.5	µg/kg wet	12.3		84.1	40-140			
Dicamba [2C]	11.9	2.5	µg/kg wet	12.3		96.7	40-140			
Surrogate: 2,4-Dichlorophenylacetic acid	100		µg/kg wet	98.5		102	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	80.2		µg/kg wet	98.5		81.4	30-150			
LCS Dup (B108457-BSD1)										
Prepared: 10/30/14 Analyzed: 11/03/14										
2,4-D	107	25	µg/kg wet	123		87.0	40-140	2.08	30	
2,4-D [2C]	95.8	25	µg/kg wet	123		77.8	40-140	2.28	30	
2,4,5-TP (Silvex)	10.6	2.5	µg/kg wet	12.3		85.9	40-140	4.23	30	
2,4,5-TP (Silvex) [2C]	9.52	2.5	µg/kg wet	12.3		77.3	40-140	0.433	30	
2,4,5-T	9.83	2.5	µg/kg wet	12.3		79.8	40-140	3.55	30	
2,4,5-T [2C]	10.1	2.5	µg/kg wet	12.3		81.7	40-140	1.20	30	
Dalapon	169	62	µg/kg wet	308		55.0	40-140	4.08	30	
Dalapon [2C]	178	62	µg/kg wet	308		57.7	40-140	3.82	30	
Dicamba	10.3	2.5	µg/kg wet	12.3		83.3	40-140	0.927	30	
Dicamba [2C]	12.6	2.5	µg/kg wet	12.3		102	40-140	5.59	30	
Surrogate: 2,4-Dichlorophenylacetic acid	98.4		µg/kg wet	98.5		99.9	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	79.7		µg/kg wet	98.5		80.9	30-150			
Matrix Spike (B108457-MS1)										
Source: 14J1384-02 Prepared: 10/30/14 Analyzed: 11/04/14										
2,4-D	125	28	µg/kg dry	140	ND	89.2	30-150			
2,4-D [2C]	103	28	µg/kg dry	140	ND	73.9	30-150			
2,4,5-TP (Silvex)	10.1	2.8	µg/kg dry	14.0	ND	72.4	30-150			
2,4,5-TP (Silvex) [2C]	12.8	2.8	µg/kg dry	14.0	ND	91.7	30-150			
2,4,5-T	11.6	2.8	µg/kg dry	14.0	ND	83.2	30-150			
2,4,5-T [2C]	11.0	2.8	µg/kg dry	14.0	ND	78.8	30-150			
Dalapon	197	70	µg/kg dry	350	ND	56.2	30-150			
Dalapon [2C]	209	70	µg/kg dry	350	ND	59.8	30-150			

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QUALITY CONTROL

Herbicides by GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B108457 - SW-846 8151

Matrix Spike (B108457-MS1)

Source: 14J1384-02

Prepared: 10/30/14 Analyzed: 11/04/14

Dicamba	13.1	2.8	µg/kg dry	14.0	ND	93.7	30-150			
Dicamba [2C]	14.9	2.8	µg/kg dry	14.0	ND	107	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid	110		µg/kg dry	112		97.9	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	102		µg/kg dry	112		90.9	30-150			

Matrix Spike Dup (B108457-MSD1)

Source: 14J1384-02

Prepared: 10/30/14 Analyzed: 11/04/14

2,4-D	120	28	µg/kg dry	140	ND	85.9	30-150	3.77	30	
2,4-D [2C]	103	28	µg/kg dry	140	ND	73.7	30-150	0.268	30	
2,4,5-TP (Silvex)	9.96	2.8	µg/kg dry	14.0	ND	71.2	30-150	1.70	30	
2,4,5-TP (Silvex) [2C]	12.4	2.8	µg/kg dry	14.0	ND	88.9	30-150	3.04	30	
2,4,5-T	11.0	2.8	µg/kg dry	14.0	ND	78.3	30-150	6.11	30	
2,4,5-T [2C]	10.6	2.8	µg/kg dry	14.0	ND	75.5	30-150	4.28	30	
Dalapon	184	70	µg/kg dry	350	ND	52.7	30-150	6.42	30	
Dalapon [2C]	196	70	µg/kg dry	350	ND	56.0	30-150	6.59	30	
Dicamba	12.5	2.8	µg/kg dry	14.0	ND	89.6	30-150	4.43	30	
Dicamba [2C]	14.6	2.8	µg/kg dry	14.0	ND	104	30-150	2.32	30	
Surrogate: 2,4-Dichlorophenylacetic acid	111		µg/kg dry	112		99.1	30-150			
Surrogate: 2,4-Dichlorophenylacetic acid [2C]	93.5		µg/kg dry	112		83.6	30-150			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B108287 - SW-846 7471

Blank (B108287-BLK1)

Prepared: 10/28/14 Analyzed: 10/30/14

Mercury	ND	0.025	mg/Kg wet							
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LCS (B108287-BS1)

Prepared: 10/28/14 Analyzed: 10/30/14

Mercury	6.12	0.38	mg/Kg wet	5.76		106	71.2-128.6			
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LCS Dup (B108287-BSD1)

Prepared: 10/28/14 Analyzed: 10/30/14

Mercury	4.99	0.36	mg/Kg wet	5.76		86.6	71.2-128.6	20.3	30	
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Batch B108389 - SW-846 3050B

Blank (B108389-BLK1)

Prepared: 10/29/14 Analyzed: 10/30/14

Arsenic	ND	2.5	mg/Kg wet							
Barium	ND	2.5	mg/Kg wet							
Cadmium	ND	0.25	mg/Kg wet							
Chromium	ND	0.50	mg/Kg wet							
Lead	ND	0.75	mg/Kg wet							
Selenium	ND	2.5	mg/Kg wet							
Silver	ND	0.50	mg/Kg wet							

LCS (B108389-BS1)

Prepared: 10/29/14 Analyzed: 10/30/14

Arsenic	131	5.5	mg/Kg wet	122		107	77.8-122.1			
Barium	174	5.5	mg/Kg wet	167		104	82-117.4			
Cadmium	94.2	0.55	mg/Kg wet	88.0		107	81.9-118.2			
Chromium	109	1.1	mg/Kg wet	102		107	78.7-120.6			
Lead	98.8	1.6	mg/Kg wet	94.5		105	82.4-117.8			
Selenium	173	5.5	mg/Kg wet	157		110	77.1-122.3			
Silver	35.0	1.1	mg/Kg wet	34.2		102	74.3-125.4			

LCS Dup (B108389-BSD1)

Prepared: 10/29/14 Analyzed: 10/30/14

Arsenic	133	5.5	mg/Kg wet	122		109	77.8-122.1	1.55	30	
Barium	181	5.5	mg/Kg wet	167		109	82-117.4	4.03	30	
Cadmium	93.8	0.55	mg/Kg wet	88.0		107	81.9-118.2	0.499	30	
Chromium	108	1.1	mg/Kg wet	102		106	78.7-120.6	0.669	30	
Lead	99.0	1.6	mg/Kg wet	94.5		105	82.4-117.8	0.142	30	
Selenium	170	5.5	mg/Kg wet	157		108	77.1-122.3	1.67	30	
Silver	35.1	1.1	mg/Kg wet	34.2		103	74.3-125.4	0.198	30	

MRL Check (B108389-MRL1)

Prepared: 10/29/14 Analyzed: 10/30/14

Lead	0.699	0.75	mg/Kg wet	0.746		93.7	80-120			
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Batch B108390 - SW-846 7471

Blank (B108390-BLK1)

Prepared: 10/29/14 Analyzed: 11/03/14

Mercury	ND	0.025	mg/Kg wet							
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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B108390 - SW-846 7471

LCS (B108390-BS1)

Prepared: 10/29/14 Analyzed: 11/03/14

Mercury	6.42	0.42	mg/Kg wet	5.76		111	71.2-128.6			
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LCS Dup (B108390-BSD1)

Prepared: 10/29/14 Analyzed: 11/03/14

Mercury	5.84	0.44	mg/Kg wet	5.76		101	71.2-128.6	9.54	30	
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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B108345 - % Solids

Duplicate (B108345-DUP1)

Source: 14J1384-01

Prepared & Analyzed: 10/29/14

% Solids	83.4		% Wt		83.1			0.360	20	
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QUALITY CONTROL

SPLP - Metals Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B108579 - SW-846 3010A

Blank (B108579-BLK1)

Prepared: 10/31/14 Analyzed: 11/03/14

Arsenic	ND	2.0	µg/L
Barium	ND	50	µg/L
Cadmium	ND	2.5	µg/L
Chromium	ND	5.0	µg/L
Lead	ND	5.0	µg/L
Selenium	ND	25	µg/L
Silver	ND	2.5	µg/L

LCS (B108579-BS1)

Prepared: 10/31/14 Analyzed: 11/03/14

Arsenic	243	2.0	µg/L	250	97.2	80-120
Barium	254	50	µg/L	250	102	80-120
Cadmium	238	2.5	µg/L	250	95.1	80-120
Chromium	248	5.0	µg/L	250	99.1	80-120
Lead	241	5.0	µg/L	250	96.5	80-120
Selenium	238	25	µg/L	250	95.1	80-120
Silver	257	2.5	µg/L	250	103	80-120

LCS Dup (B108579-BSD1)

Prepared: 10/31/14 Analyzed: 11/03/14

Arsenic	240	2.0	µg/L	250	96.0	80-120	1.31	20
Barium	254	50	µg/L	250	102	80-120	0.101	20
Cadmium	237	2.5	µg/L	250	94.9	80-120	0.244	20
Chromium	244	5.0	µg/L	250	97.7	80-120	1.47	20
Lead	234	5.0	µg/L	250	93.8	80-120	2.86	20
Selenium	238	25	µg/L	250	95.4	80-120	0.223	20
Silver	259	2.5	µg/L	250	104	80-120	0.844	20

Matrix Spike (B108579-MS1)

Source: 14J1384-01

Prepared: 10/31/14 Analyzed: 11/03/14

Arsenic	243	2.0	µg/L	250	ND	97.3	75-125
Barium	269	50	µg/L	250	31.0	95.3	75-125
Cadmium	236	2.5	µg/L	250	0.217	94.5	75-125
Chromium	247	5.0	µg/L	250	2.60	97.9	75-125
Lead	239	5.0	µg/L	250	1.18	95.2	75-125
Selenium	242	25	µg/L	250	ND	96.9	75-125
Silver	260	2.5	µg/L	250	ND	104	75-125

Batch B108585 - SW-846 7470A Prep

Blank (B108585-BLK1)

Prepared & Analyzed: 10/31/14

Mercury	ND	0.00010	mg/L
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LCS (B108585-BS1)

Prepared & Analyzed: 10/31/14

Mercury	0.00199	0.00010	mg/L	0.00200	99.6	80-120
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QUALITY CONTROL

SPLP - Metals Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B108585 - SW-846 7470A Prep

LCS Dup (B108585-BSD1)

Prepared & Analyzed: 10/31/14

Mercury	0.00198	0.00010	mg/L	0.00200		99.1	80-120	0.501	20	
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Matrix Spike (B108585-MS1)

Source: 14J1384-01

Prepared & Analyzed: 10/31/14

Mercury	0.00189	0.00010	mg/L	0.00200	ND	94.6	75-125			
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BREAKDOWN REPORT

Lab Sample ID: S007013-PEM1 **Analyzed:** 10/31/2014

Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	5.77
Endrin [1]	5.25

Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	4.11
Endrin [2]	4.49

BREAKDOWN REPORT

Lab Sample ID: S007013-PEM2 **Analyzed:** 10/31/2014

Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	6.95
Endrin [1]	6.34

Column Number: 2

Analyte	% Breakdown
4,4'-DDT [2]	5.05
Endrin [2]	5.65

BREAKDOWN REPORT

Lab Sample ID: S007013-PEM3 **Analyzed:** 11/01/2014

Column Number: 1

Analyte	% Breakdown
4,4'-DDT [1]	5.23
Endrin [1]	6.55

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BREAKDOWN REPORT

Lab Sample ID:	S007013-PEM3	Analyzed:	11/01/2014
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Column Number:	2
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Analyte	% Breakdown
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4,4'-DDT [2]	4.01
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Endrin [2]	5.15
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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES****SO-86111-102714-AB-002***SW-846 8081B*

Lab Sample ID: 14J1384-02 Date(s) Analyzed: 10/31/2014 10/31/2014
Instrument ID (1): ECD 2A Instrument ID (2): ECD 2A
GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
4,4'-DDE	1	6.96	0.00	0.00	0.016	
	2	6.99	0.00	0.00	0.019	17.8
4,4'-DDT	1	7.63	0.00	0.00	0.0091	
	2	7.68	0.00	0.00	0.0097	6.2

IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8081B

LCS

Lab Sample ID: B108415-BS1 Date(s) Analyzed: 10/31/2014 10/31/2014

Instrument ID (1): ECD 2AA Instrument ID (2): ECD 2AB

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
4,4'-DDD	1	7.41	0.00	0.00	0.087	
	2	7.44	0.00	0.00	0.091	5
4,4'-DDE	1	6.96	0.00	0.00	0.086	
	2	6.99	0.00	0.00	0.090	5
4,4'-DDT	1	7.63	0.00	0.00	0.080	
	2	7.68	0.00	0.00	0.081	1
Alachlor	1	6.38	0.00	0.00	0.086	
	2	6.16	0.00	0.00	0.072	18
Aldrin	1	6.29	0.00	0.00	0.083	
	2	6.22	0.00	0.00	0.088	6
alpha-BHC	1	5.56	0.00	0.00	0.079	
	2	5.50	0.00	0.00	0.079	1
beta-BHC	1	5.82	0.00	0.00	0.075	
	2	5.78	0.00	0.00	0.077	3
delta-BHC	1	5.94	0.00	0.00	0.066	
	2	5.97	0.00	0.00	0.068	3
Dieldrin	1	7.19	0.00	0.00	0.079	
	2	7.11	0.00	0.00	0.087	10
Endosulfan I	1	7.01	0.00	0.00	0.078	
	2	6.91	0.00	0.00	0.081	3
Endosulfan II	1	7.53	0.00	0.00	0.080	
	2	7.50	0.00	0.00	0.083	3
Endosulfan Sulfate	1	8.18	0.00	0.00	0.077	
	2	7.98	0.00	0.00	0.078	1
Endrin	1	7.36	0.00	0.00	0.080	
	2	7.34	0.00	0.00	0.083	3
Endrin Aldehyde	1	7.86	0.00	0.00	0.081	
	2	7.77	0.00	0.00	0.082	1
Endrin Ketone	1	8.37	0.00	0.00	0.077	
	2	8.35	0.00	0.00	0.083	7
gamma-BHC (Lindane)	1	5.76	0.00	0.00	0.081	

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8081B

LCS

Lab Sample ID: B108415-BS1 Date(s) Analyzed: 10/31/2014 10/31/2014

Instrument ID (1): ECD 2AA Instrument ID (2): ECD 2AB

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
	2	5.72	0.00	0.00	0.081	0
Heptachlor	1	6.08	0.00	0.00	0.056	
	2	6.01	0.00	0.00	0.081	37
Heptachlor Epoxide	1	6.72	0.00	0.00	0.080	
	2	6.62	0.00	0.00	0.083	4
Hexachlorobenzene	1	5.45	0.00	0.00	0.093	
	2	5.41	0.00	0.00	0.085	9
Methoxychlor	1	8.01	0.00	0.00	0.073	
	2	8.20	0.00	0.00	0.080	9

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8081B

LCS Dup

Lab Sample ID: B108415-BSD1 Date(s) Analyzed: 10/31/2014 10/31/2014

Instrument ID (1): ECD 2AA Instrument ID (2): ECD 2AB

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
4,4'-DDD	1	7.41	0.00	0.00	0.091	
	2	7.43	0.00	0.00	0.095	5
4,4'-DDE	1	6.96	0.00	0.00	0.088	
	2	6.99	0.00	0.00	0.093	6
4,4'-DDT	1	7.63	0.00	0.00	0.084	
	2	7.68	0.00	0.00	0.084	0
Alachlor	1	6.38	0.00	0.00	0.082	
	2	6.16	0.00	0.00	0.070	15
Aldrin	1	6.29	0.00	0.00	0.082	
	2	6.22	0.00	0.00	0.087	5
alpha-BHC	1	5.55	0.00	0.00	0.079	
	2	5.50	0.00	0.00	0.077	2
beta-BHC	1	5.82	0.00	0.00	0.074	
	2	5.78	0.00	0.00	0.078	5
delta-BHC	1	5.94	0.00	0.00	0.072	
	2	5.97	0.00	0.00	0.074	3
Dieldrin	1	7.19	0.00	0.00	0.080	
	2	7.11	0.00	0.00	0.089	10
Endosulfan I	1	7.01	0.00	0.00	0.080	
	2	6.91	0.00	0.00	0.083	3
Endosulfan II	1	7.53	0.00	0.00	0.083	
	2	7.50	0.00	0.00	0.086	4
Endosulfan Sulfate	1	8.18	0.00	0.00	0.078	
	2	7.98	0.00	0.00	0.078	0
Endrin	1	7.36	0.00	0.00	0.082	
	2	7.34	0.00	0.00	0.085	4
Endrin Aldehyde	1	7.86	0.00	0.00	0.084	
	2	7.77	0.00	0.00	0.085	1
Endrin Ketone	1	8.37	0.00	0.00	0.077	
	2	8.35	0.00	0.00	0.081	5
gamma-BHC (Lindane)	1	5.76	0.00	0.00	0.078	

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8081B

LCS Dup

Lab Sample ID: B108415-BSD1 Date(s) Analyzed: 10/31/2014 10/31/2014

Instrument ID (1): ECD 2AA Instrument ID (2): ECD 2AB

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
	2	5.72	0.00	0.00	0.079	1
Heptachlor	1	6.08	0.00	0.00	0.054	
	2	6.01	0.00	0.00	0.080	38
Heptachlor Epoxide	1	6.72	0.00	0.00	0.080	
	2	6.62	0.00	0.00	0.083	4
Hexachlorobenzene	1	5.45	0.00	0.00	0.090	
	2	5.41	0.00	0.00	0.083	8
Methoxychlor	1	8.01	0.00	0.00	0.076	
	2	8.20	0.00	0.00	0.082	8

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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES**

SW-846 8082A

LCS

Lab Sample ID: B108416-BS1 Date(s) Analyzed: 10/30/2014 10/30/2014
 Instrument ID (1): _____ Instrument ID (2): _____
 GC Column (1): _____ ID: _____ (mm) GC Column (2): _____ ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.20	
	2	0.00	0.00	0.00	0.23	16
Aroclor-1260	1	0.00	0.00	0.00	0.20	
	2	0.00	0.00	0.00	0.22	8

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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES***SW-846 8082A***LCS Dup**Lab Sample ID: B108416-BSD1 Date(s) Analyzed: 10/30/2014 10/30/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.19	
	2	0.00	0.00	0.00	0.23	19
Aroclor-1260	1	0.00	0.00	0.00	0.20	
	2	0.00	0.00	0.00	0.21	5

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike

Lab Sample ID: B108416-MS1 Date(s) Analyzed: 10/30/2014 10/30/2014
Instrument ID (1): _____ Instrument ID (2): _____
GC Column (1): _____ ID: _____ (mm) GC Column (2): _____ ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.26	16
Aroclor-1260	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.24	10

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**IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES***SW-846 8082A***Matrix Spike Dup**

Lab Sample ID: B108416-MSD1 Date(s) Analyzed: 10/30/2014 10/30/2014
Instrument ID (1): _____ Instrument ID (2): _____
GC Column (1): _____ ID: _____ (mm) GC Column (2): _____ ID: _____ (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
Aroclor-1016	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.25	14
Aroclor-1260	1	0.00	0.00	0.00	0.22	
	2	0.00	0.00	0.00	0.23	7

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8151A

LCS

Lab Sample ID: B108457-BS1 Date(s) Analyzed: 11/03/2014 11/03/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-T	1	14.04	0.00	0.00	10.2	
	2	15.51	0.00	0.00	10.2	0
2,4,5-TP (Silvex)	1	13.46	0.00	0.00	11.0	
	2	14.67	0.00	0.00	9.48	15
2,4-D	1	11.79	0.00	0.00	109	
	2	12.96	0.00	0.00	98.0	11
Dalapon	1	3.94	0.00	0.00	176	
	2	3.99	0.00	0.00	185	5
Dicamba	1	9.94	0.00	0.00	10.4	
	2	10.81	0.00	0.00	11.9	14

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8151A

LCS Dup

Lab Sample ID: B108457-BSD1 Date(s) Analyzed: 11/03/2014 11/03/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-T	1	14.04	0.00	0.00	9.83	
	2	15.51	0.00	0.00	10.1	3
2,4,5-TP (Silvex)	1	13.46	0.00	0.00	10.6	
	2	14.67	0.00	0.00	9.52	11
2,4-D	1	11.79	0.00	0.00	107	
	2	12.96	0.00	0.00	95.8	11
Dalapon	1	3.94	0.00	0.00	169	
	2	3.99	0.00	0.00	178	5
Dicamba	1	9.94	0.00	0.00	10.3	
	2	10.81	0.00	0.00	12.6	20

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8151A
Matrix Spike

Lab Sample ID: B108457-MS1 Date(s) Analyzed: 11/04/2014 11/04/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-T	1	14.04	0.00	0.00	11.6	
	2	15.51	0.00	0.00	11.0	5
2,4,5-TP (Silvex)	1	13.46	0.00	0.00	10.1	
	2	14.67	0.00	0.00	12.8	24
2,4-D	1	11.79	0.00	0.00	125	
	2	12.96	0.00	0.00	103	19
Dalapon	1	3.94	0.00	0.00	197	
	2	3.99	0.00	0.00	209	6
Dicamba	1	9.94	0.00	0.00	13.1	
	2	10.81	0.00	0.00	14.9	13

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8151A

Matrix Spike Dup

Lab Sample ID: B108457-MSD1 Date(s) Analyzed: 11/04/2014 11/04/2014

Instrument ID (1): Instrument ID (2):

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%D
			FROM	TO		
2,4,5-T	1	14.04	0.00	0.00	11.0	
	2	15.51	0.00	0.00	10.6	4
2,4,5-TP (Silvex)	1	13.46	0.00	0.00	9.96	
	2	14.67	0.00	0.00	12.4	22
2,4-D	1	11.79	0.00	0.00	120	
	2	12.96	0.00	0.00	103	15
Dalapon	1	3.94	0.00	0.00	184	
	2	3.99	0.00	0.00	196	6
Dicamba	1	9.94	0.00	0.00	12.5	
	2	10.81	0.00	0.00	14.6	16

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
O-32	A five times dilution was performed as part of the standard analytical procedure.
V-05	Continuing calibration did not meet method specifications and was biased on the low side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the low side.
V-06	Continuing calibration did not meet method specifications and was biased on the high side for this compound. Increased uncertainty is associated with the reported value which is likely to be biased on the high side.
V-16	Response factor is less than method specified minimum acceptable value. Reduced precision and accuracy may be associated with reported result.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 6010C in Soil</i>	
Arsenic	CT,NH,NY,ME,NC,VA,NJ
Barium	CT,NH,NY,ME,NC,VA,NJ
Cadmium	CT,NH,NY,ME,NC,VA,NJ
Chromium	CT,NH,NY,ME,NC,VA,NJ
Lead	CT,NH,NY,AIHA,ME,NC,VA,NJ
Selenium	CT,NH,NY,ME,NC,VA,NJ
Silver	CT,NH,NY,ME,NC,VA,NJ
<i>SW-846 7471B in Soil</i>	
Mercury	CT,NH,NY,NC,ME,VA,NJ
<i>SW-846 8081B in Soil</i>	
Alachlor	NC
Alachlor [2C]	NC
Aldrin	CT,NH,NY,ME,NC,VA,NJ
Aldrin [2C]	CT,NH,NY,ME,NC,VA,NJ
alpha-BHC	CT,NH,NY,ME,NC,VA,NJ
alpha-BHC [2C]	CT,NH,NY,ME,NC,VA,NJ
beta-BHC	CT,NH,NY,ME,NC,VA,NJ
beta-BHC [2C]	CT,NH,NY,ME,NC,VA,NJ
delta-BHC	CT,NH,NY,ME,NC,VA,NJ
delta-BHC [2C]	CT,NH,NY,ME,NC,VA,NJ
gamma-BHC (Lindane)	CT,NH,NY,ME,NC,VA,NJ
gamma-BHC (Lindane) [2C]	CT,NH,NY,ME,NC,VA,NJ
Chlordane	CT,NH,NY,ME,NC,VA,NJ
Chlordane [2C]	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDD	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDD [2C]	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDE	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDE [2C]	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDT	CT,NH,NY,ME,NC,VA,NJ
4,4'-DDT [2C]	CT,NH,NY,ME,NC,VA,NJ
Dieldrin	CT,NH,NY,ME,NC,VA,NJ
Dieldrin [2C]	CT,NH,NY,ME,NC,VA,NJ
Endosulfan I	CT,NH,NY,ME,NC,VA,NJ
Endosulfan I [2C]	CT,NH,NY,ME,NC,VA,NJ
Endosulfan II	CT,NH,NY,ME,NC,VA,NJ
Endosulfan II [2C]	CT,NH,NY,ME,NC,VA,NJ
Endosulfan Sulfate	CT,NH,NY,ME,NC,VA,NJ
Endosulfan Sulfate [2C]	CT,NH,NY,ME,NC,VA,NJ
Endrin	CT,NH,NY,ME,NC,VA,NJ
Endrin [2C]	CT,NH,NY,ME,NC,VA,NJ
Endrin Aldehyde	CT,NH,NY,ME,NC,VA,NJ
Endrin Aldehyde [2C]	CT,NH,NY,ME,NC,VA,NJ
Endrin Ketone	NC
Endrin Ketone [2C]	NC
Heptachlor	CT,NH,NY,ME,NC,VA,NJ
Heptachlor [2C]	CT,NH,NY,ME,NC,VA,NJ

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8081B in Soil</i>	
Heptachlor Epoxide	CT,NH,NY,ME,NC,VA,NJ
Heptachlor Epoxide [2C]	CT,NH,NY,ME,NC,VA,NJ
Hexachlorobenzene	NC
Hexachlorobenzene [2C]	NC
Methoxychlor	CT,NH,NY,ME,NC,VA,NJ
Methoxychlor [2C]	CT,NH,NY,ME,NC,VA,NJ
Toxaphene	CT,NH,NY,ME,NC,VA,NJ
Toxaphene [2C]	CT,NH,NY,ME,NC,VA,NJ
<i>SW-846 8082A in Soil</i>	
Aroclor-1016	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,NJ
Aroclor-1262	NC
Aroclor-1262 [2C]	NC
Aroclor-1268	NC
Aroclor-1268 [2C]	NC
<i>SW-846 8260C in Soil</i>	
Acetone	CT,NH,NY,ME
Acrylonitrile	CT,NH,NY,ME
Benzene	CT,NH,NY,ME
Bromobenzene	NH,NY,ME
Bromodichloromethane	CT,NH,NY,ME
Bromoform	CT,NH,NY,ME
Bromomethane	CT,NH,NY,ME
2-Butanone (MEK)	CT,NH,NY,ME
n-Butylbenzene	CT,NH,NY,ME
sec-Butylbenzene	CT,NH,NY,ME
tert-Butylbenzene	CT,NH,NY,ME
Carbon Disulfide	CT,NH,NY,ME
Carbon Tetrachloride	CT,NH,NY,ME
Chlorobenzene	CT,NH,NY,ME
Chlorodibromomethane	CT,NH,NY,ME
Chloroethane	CT,NH,NY,ME
Chloroform	CT,NH,NY,ME
Chloromethane	CT,NH,NY,ME

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260C in Soil</i>	
2-Chlorotoluene	CT,NH,NY,ME
4-Chlorotoluene	CT,NH,NY,ME
Dibromomethane	NH,NY,ME
1,2-Dichlorobenzene	CT,NH,NY,ME
1,3-Dichlorobenzene	CT,NH,NY,ME
1,4-Dichlorobenzene	CT,NH,NY,ME
Dichlorodifluoromethane (Freon 12)	NY,ME
1,1-Dichloroethane	CT,NH,NY,ME
1,2-Dichloroethane	CT,NH,NY,ME
1,1-Dichloroethylene	CT,NH,NY,ME
cis-1,2-Dichloroethylene	CT,NH,NY,ME
trans-1,2-Dichloroethylene	CT,NH,NY,ME
1,2-Dichloropropane	CT,NH,NY,ME
1,3-Dichloropropane	NH,NY,ME
2,2-Dichloropropane	NH,NY,ME
1,1-Dichloropropene	NH,NY,ME
cis-1,3-Dichloropropene	CT,NH,NY,ME
trans-1,3-Dichloropropene	CT,NH,NY,ME
Ethylbenzene	CT,NH,NY,ME
Hexachlorobutadiene	NH,NY,ME
2-Hexanone (MBK)	CT,NH,NY,ME
Isopropylbenzene (Cumene)	CT,NH,NY,ME
p-Isopropyltoluene (p-Cymene)	NH,NY
Methyl tert-Butyl Ether (MTBE)	NY
Methylene Chloride	CT,NH,NY,ME
4-Methyl-2-pentanone (MIBK)	CT,NH,NY
Naphthalene	NH,NY,ME
n-Propylbenzene	NH,NY
Styrene	CT,NH,NY,ME
1,1,1,2-Tetrachloroethane	CT,NH,NY,ME
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME
Tetrachloroethylene	CT,NH,NY,ME
Toluene	CT,NH,NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME
1,1,1-Trichloroethane	CT,NH,NY,ME
1,1,2-Trichloroethane	CT,NH,NY,ME
Trichloroethylene	CT,NH,NY,ME
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME
1,2,3-Trichloropropane	NH,NY,ME
1,2,4-Trimethylbenzene	CT,NH,NY,ME
1,3,5-Trimethylbenzene	CT,NH,NY,ME
Vinyl Chloride	CT,NH,NY,ME
m+p Xylene	CT,NH,NY,ME
o-Xylene	CT,NH,NY,ME
<i>SW-846 8270D in Soil</i>	
Acenaphthene	CT,NY,NH

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270D in Soil	
Acenaphthylene	CT,NY,NH
Aniline	NY,NH
Anthracene	CT,NY,NH
Benzo(a)anthracene	CT,NY,NH
Benzo(a)pyrene	CT,NY,NH
Benzo(b)fluoranthene	CT,NY,NH
Benzo(g,h,i)perylene	CT,NY,NH
Benzo(k)fluoranthene	CT,NY,NH
Bis(2-chloroethoxy)methane	CT,NY,NH
Bis(2-chloroethyl)ether	CT,NY,NH
Bis(2-chloroisopropyl)ether	CT,NY,NH
Bis(2-Ethylhexyl)phthalate	CT,NY,NH
4-Bromophenylphenylether	CT,NY,NH
Butylbenzylphthalate	CT,NY,NH
4-Chloroaniline	CT,NY,NH
4-Chloro-3-methylphenol	CT,NY,NH
2-Chloronaphthalene	CT,NY,NH
2-Chlorophenol	CT,NY,NH
4-Chlorophenylphenylether	CT,NY,NH
Chrysene	CT,NY,NH
Dibenz(a,h)anthracene	CT,NY,NH
Dibenzofuran	CT,NY,NH
Di-n-butylphthalate	CT,NY,NH
1,2-Dichlorobenzene	NY,NH
1,3-Dichlorobenzene	NY,NH
1,4-Dichlorobenzene	NY,NH
3,3-Dichlorobenzidine	CT,NY,NH
2,4-Dichlorophenol	CT,NY,NH
Diethylphthalate	CT,NY,NH
2,4-Dimethylphenol	CT,NY,NH
Dimethylphthalate	CT,NY,NH
4,6-Dinitro-2-methylphenol	CT,NY,NH
2,4-Dinitrophenol	CT,NY,NH
2,4-Dinitrotoluene	CT,NY,NH
2,6-Dinitrotoluene	CT,NY,NH
Di-n-octylphthalate	CT,NY,NH
Fluoranthene	CT,NY,NH
Fluorene	NY,NH
Hexachlorobenzene	CT,NY,NH
Hexachlorobutadiene	CT,NY,NH
Hexachlorocyclopentadiene	CT,NY,NH
Hexachloroethane	CT,NY,NH
Indeno(1,2,3-cd)pyrene	CT,NY,NH
Isophorone	CT,NY,NH
2-Methylnaphthalene	CT,NY,NH
2-Methylphenol	CT,NY,NH
3/4-Methylphenol	CT,NY,NH

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8270D in Soil</i>	
Naphthalene	CT,NY,NH
2-Nitroaniline	CT,NY,NH
3-Nitroaniline	CT,NY,NH
4-Nitroaniline	CT,NY,NH
Nitrobenzene	CT,NY,NH
2-Nitrophenol	CT,NY,NH
4-Nitrophenol	CT,NY,NH
N-Nitrosodiphenylamine	CT,NY,NH
N-Nitrosodi-n-propylamine	CT,NY,NH
Pentachlorophenol	CT,NY,NH
Phenanthrene	CT,NY,NH
Phenol	CT,NY,NH
Pyrene	CT,NY,NH
Pyridine	CT,NY,NH
1,2,4-Trichlorobenzene	CT,NY,NH
2,4,5-Trichlorophenol	CT,NY,NH
2,4,6-Trichlorophenol	CT,NY,NH

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Public Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015

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East Longmeadow, MA. 01028
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F: 413-525-6405
www.contestlabs.com



Page 1 of 2

Sample Receipt Checklist

CLIENT NAME: Conestoga-Rovers and Associates RECEIVED BY: JDL DATE: 10/28/14

1) Was the chain(s) of custody relinquished and signed? Yes No No CoC Included

2) Does the chain agree with the samples? Yes No

If not, explain:

3) Are all the samples in good condition? Yes No

If not, explain:

4) How were the samples received:

On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 5.4

5) Are there Dissolved samples for the lab to filter? Yes No

Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes No

Who was notified _____ Date _____ Time _____

7) Location where samples are stored:

19

Permission to subcontract samples? Yes No

(Walk-in clients only) if not already approved

Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No N/A

9) Do all samples have the proper Base pH: Yes No N/A

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz <u>amber</u> /clear jar	<u>1</u>
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below	<u>15</u>	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar <u>16oz amb</u>	<u>5</u>
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol 5

Doc# 277 # Bisulfate _____ # DI Water 10

Rev. 4 August 2013 # Thiosulfate _____ Unpreserved

Time and Date Frozen:

10/28/14 9:50 JDL
16:55

TOF-3-B

Page 2 of 2

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

<u>Question</u>	<u>Answer (True/False)</u>	<u>Comment</u>
	<u>T/F/NA</u>	
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Doc #277 Rev. 4 August 2013

Who notified of False statements?

Log-In Technician Initials:

JDL

Date/Time:

Date/Time: 10/28/14

9:50

JDL

16:55



TOF-3-B

REASONABLE CONFIDENCE PROTOCOL

LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Con-Test Analytical Laboratory

Client: United Illuminating Company

Project Location: Hawthorne Substation Phase II - Fairfield,

Project Number: 14J1384

Laboratory Sample ID(s): CT
14J1384-01 thru 14J1384-05

Sample Date(s):

10/27/2014

List RCP Methods Used:

SW-846 1312, SW-846 6010C, SW-846 6020A, SW-846 7470A, SW-846 7471B, SW-846 8081B, SW-846 8082A, SW-846 8151A, SW-846 8260C, SW-846 8270D

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	☒ Yes ☐ No
1A	Were the method specified preservation and holding time requirements met?	☒ Yes ☐ No
1B	VPH and EPH Methods only: Was the VPH and EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	☐ Yes ☐ No ☒ N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	☒ Yes ☐ No
3	Were samples received at an appropriate temperature (< 6 degrees C.)?	☒ Yes ☐ No ☐ N/A
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	☒ Yes ☐ No
5A	Were reporting limits specified or referenced on the chain-of-custody?	☐ Yes ☒ No
5B	Were these reporting limits met?	☐ Yes ☐ No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☐ Yes ☒ No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	☒ Yes ☐ No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."
This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature:
Reporting
Position: Manager, Laboratory
Printed Name: Johanna K. Harrington
Date: 11/04/14

This certification form is to be used for RCP methods only.

November 24, 2014

Kathy Shaw - CRA
United Illuminating Company
180 Marsh Hill Road
Orange, CT 06477

Project Location: Hawthorne Substation Phase II - Fairfield, CT
Client Job Number:
Project Number: 086111-001
Laboratory Work Order Number: 14K0721

Enclosed are results of analyses for samples received by the laboratory on November 17, 2014. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "James Georgantas". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

James M. Georgantas
Project Manager

TOF-3-B

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United Illuminating Company
180 Marsh Hill Road
Orange, CT 06477
ATTN: Kathy Shaw - CRA

REPORT DATE: 11/24/2014

PURCHASE ORDER NUMBER: 4500424931-10

PROJECT NUMBER: 086111-001

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 14K0721

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION: Hawthorne Substation Phase II - Fairfield, CT

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SO-86111-102714-AB-001	14K0721-01	Soil		CTDEP ETPH SM 2540G SM21-22 2510B Modified SW-846 1010 SW-846 9014 SW-846 9030A SW-846 9045C	
SO-86111-102714-AB-002	14K0721-02	Soil		CTDEP ETPH SM 2540G SM21-22 2510B Modified SW-846 1010 SW-846 9014 SW-846 9030A SW-846 9045C	
SO-86111-102714-AB-003	14K0721-03	Soil		CTDEP ETPH SM 2540G SM21-22 2510B Modified SW-846 1010 SW-846 9014 SW-846 9030A SW-846 9045C	
SO-86111-102714-AB-004	14K0721-04	Soil		CTDEP ETPH SM 2540G SM21-22 2510B Modified SW-846 1010 SW-846 9014 SW-846 9030A SW-846 9045C	
SO-86111-102714-AB-005	14K0721-05	Soil		CTDEP ETPH SM 2540G SM21-22 2510B Modified SW-846 1010 SW-846 9014 SW-846 9030A SW-846 9045C	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

CTDEP ETPH

Qualifications:

H-10

Analysis was requested after the recommended holding time had passed.

Analyte & Samples(s) Qualified:

14K0721-01[SO-86111-102714-AB-001], 14K0721-02[SO-86111-102714-AB-002], 14K0721-03[SO-86111-102714-AB-003], 14K0721-04[SO-86111-102714-AB-004],
14K0721-05[SO-86111-102714-AB-005]

SW-846 1010

Qualifications:

H-10

Analysis was requested after the recommended holding time had passed.

Analyte & Samples(s) Qualified:

Flashpoint

14K0721-01[SO-86111-102714-AB-001], 14K0721-02[SO-86111-102714-AB-002], 14K0721-03[SO-86111-102714-AB-003], 14K0721-04[SO-86111-102714-AB-004],
14K0721-05[SO-86111-102714-AB-005]

SW-846 9045C

Qualifications:

H-10

Analysis was requested after the recommended holding time had passed.

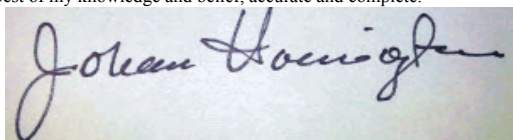
Analyte & Samples(s) Qualified:

pH

14K0721-01[SO-86111-102714-AB-001], 14K0721-02[SO-86111-102714-AB-002], 14K0721-03[SO-86111-102714-AB-003], 14K0721-04[SO-86111-102714-AB-004],
14K0721-05[SO-86111-102714-AB-005]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Johanna K. Harrington

Manager, Laboratory Reporting

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14K0721

Date Received: 11/17/2014

Field Sample #: SO-86111-102714-AB-001

Sampled: 10/27/2014 09:15

Sample ID: 14K0721-01

Sample Matrix: Soil

Sample Flags: H-10

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	ND	11	mg/Kg dry	1		CTDEP ETPH	11/18/14	11/19/14 15:09	SCS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
o-Terphenyl	61.9	50-150						11/19/14 15:09	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14K0721

Date Received: 11/17/2014

Field Sample #: SO-86111-102714-AB-001

Sampled: 10/27/2014 09:15

Sample ID: 14K0721-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Flashpoint	> 212 °F		°F	1	H-10	SW-846 1010	11/18/14	11/18/14 15:10	AG
pH @22.2°C	5.0		pH Units	1	H-10	SW-846 9045C	11/18/14	11/18/14 8:20	LL
Reactive Cyanide	ND	4.0	mg/Kg	1		SW-846 9014	11/18/14	11/18/14 12:10	AG
Reactive Sulfide	ND	20	mg/Kg	1		SW-846 9030A	11/18/14	11/19/14 14:10	DJM
Specific conductance	7.6	2.3	µmhos/cm dry	1		SM21-22 2510B Modified	11/18/14	11/18/14 13:35	AG
% Solids	87.8		% Wt	1		SM 2540G	11/21/14	11/24/14 9:21	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14K0721

Date Received: 11/17/2014

Field Sample #: SO-86111-102714-AB-002

Sampled: 10/27/2014 10:30

Sample ID: 14K0721-02

Sample Matrix: Soil

Sample Flags: H-10

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	ND	10	mg/Kg dry	1		CTDEP ETPH	11/18/14	11/19/14 15:27	SCS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
o-Terphenyl	70.6	50-150						11/19/14 15:27	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14K0721

Date Received: 11/17/2014

Field Sample #: SO-86111-102714-AB-002

Sampled: 10/27/2014 10:30

Sample ID: 14K0721-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Flashpoint	> 212 °F		°F	1	H-10	SW-846 1010	11/18/14	11/18/14 15:10	AG
pH @23.1°C	5.6		pH Units	1	H-10	SW-846 9045C	11/18/14	11/18/14 8:20	LL
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	11/18/14	11/18/14 12:10	AG
Reactive Sulfide	ND	20	mg/Kg	1		SW-846 9030A	11/18/14	11/19/14 14:10	DJM
Specific conductance	3.5	2.1	µmhos/cm dry	1		SM21-22 2510B Modified	11/18/14	11/18/14 13:35	AG
% Solids	95.7		% Wt	1		SM 2540G	11/21/14	11/24/14 9:21	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14K0721

Date Received: 11/17/2014

Field Sample #: SO-86111-102714-AB-003

Sampled: 10/27/2014 11:00

Sample ID: 14K0721-03

Sample Matrix: Soil

Sample Flags: H-10

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	ND	10	mg/Kg dry	1		CTDEP ETPH	11/18/14	11/19/14 15:44	SCS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
o-Terphenyl	82.5	50-150						11/19/14 15:44	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14K0721

Date Received: 11/17/2014

Field Sample #: SO-86111-102714-AB-003

Sampled: 10/27/2014 11:00

Sample ID: 14K0721-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Flashpoint	> 212 °F		°F	1	H-10	SW-846 1010	11/18/14	11/18/14 15:10	AG
pH @25.9°C	5.6		pH Units	1	H-10	SW-846 9045C	11/18/14	11/18/14 8:20	LL
Reactive Cyanide	ND	4.0	mg/Kg	1		SW-846 9014	11/18/14	11/18/14 12:10	AG
Reactive Sulfide	ND	20	mg/Kg	1		SW-846 9030A	11/18/14	11/19/14 14:10	DJM
Specific conductance	2.8	2.0	µmhos/cm dry	1		SM21-22 2510B Modified	11/18/14	11/18/14 13:35	AG
% Solids	98.4		% Wt	1		SM 2540G	11/21/14	11/24/14 9:21	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14K0721

Date Received: 11/17/2014

Field Sample #: SO-86111-102714-AB-004

Sampled: 10/27/2014 11:25

Sample ID: 14K0721-04

Sample Matrix: Soil

Sample Flags: H-10

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	24	11	mg/Kg dry	1		CTDEP ETPH	11/18/14	11/19/14 16:02	SCS
Surrogates	% Recovery		Recovery Limits		Flag/Qual				
o-Terphenyl	75.6		50-150				11/19/14 16:02		

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14K0721

Date Received: 11/17/2014

Field Sample #: SO-86111-102714-AB-004

Sampled: 10/27/2014 11:25

Sample ID: 14K0721-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Flashpoint	> 212 °F		°F	1	H-10	SW-846 1010	11/18/14	11/18/14 15:10	AG
pH @23.5°C	5.7		pH Units	1	H-10	SW-846 9045C	11/18/14	11/18/14 8:20	LL
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	11/18/14	11/18/14 12:10	AG
Reactive Sulfide	ND	19	mg/Kg	1		SW-846 9030A	11/18/14	11/19/14 14:10	DJM
Specific conductance	3.5	2.1	µmhos/cm dry	1		SM21-22 2510B Modified	11/18/14	11/18/14 13:35	AG
% Solids	93.3		% Wt	1		SM 2540G	11/21/14	11/24/14 9:21	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14K0721

Date Received: 11/17/2014

Field Sample #: SO-86111-102714-AB-005

Sampled: 10/27/2014 12:30

Sample ID: 14K0721-05

Sample Matrix: Soil

Sample Flags: H-10

Petroleum Hydrocarbons Analyses

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
CT ETPH	ND	11	mg/Kg dry	1		CTDEP ETPH	11/18/14	11/19/14 16:19	SCS
Surrogates	% Recovery	Recovery Limits	Flag/Qual						
o-Terphenyl	70.8	50-150						11/19/14 16:19	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Hawthorne Substation Phase II - F

Sample Description:

Work Order: 14K0721

Date Received: 11/17/2014

Field Sample #: SO-86111-102714-AB-005

Sampled: 10/27/2014 12:30

Sample ID: 14K0721-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Flashpoint	> 212 °F		°F	1	H-10	SW-846 1010	11/18/14	11/18/14 15:10	AG
pH @23.4°C	6.5		pH Units	1	H-10	SW-846 9045C	11/18/14	11/18/14 8:20	LL
Reactive Cyanide	ND	3.9	mg/Kg	1		SW-846 9014	11/18/14	11/18/14 12:10	AG
Reactive Sulfide	ND	20	mg/Kg	1		SW-846 9030A	11/18/14	11/19/14 14:10	DJM
Specific conductance	2.9	2.1	µmhos/cm dry	1		SM21-22 2510B Modified	11/18/14	11/18/14 13:35	AG
% Solids	93.8		% Wt	1		SM 2540G	11/21/14	11/24/14 9:21	MRL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: SW-846 3546-CTDEP ETPH

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14K0721-01 [SO-86111-102714-AB-001]	B110040	30.0	1.00	11/18/14
14K0721-02 [SO-86111-102714-AB-002]	B110040	30.0	1.00	11/18/14
14K0721-03 [SO-86111-102714-AB-003]	B110040	30.1	1.00	11/18/14
14K0721-04 [SO-86111-102714-AB-004]	B110040	30.0	1.00	11/18/14
14K0721-05 [SO-86111-102714-AB-005]	B110040	30.3	1.00	11/18/14

Prep Method: % Solids-SM 2540G

Lab Number [Field ID]	Batch	Date
14K0721-01 [SO-86111-102714-AB-001]	B110298	11/21/14
14K0721-02 [SO-86111-102714-AB-002]	B110298	11/21/14
14K0721-03 [SO-86111-102714-AB-003]	B110298	11/21/14
14K0721-04 [SO-86111-102714-AB-004]	B110298	11/21/14
14K0721-05 [SO-86111-102714-AB-005]	B110298	11/21/14

SM21-22 2510B Modified

Lab Number [Field ID]	Batch	Initial [g]	Date
14K0721-01 [SO-86111-102714-AB-001]	B109968	1.00	11/18/14
14K0721-02 [SO-86111-102714-AB-002]	B109968	1.00	11/18/14
14K0721-03 [SO-86111-102714-AB-003]	B109968	1.00	11/18/14
14K0721-04 [SO-86111-102714-AB-004]	B109968	1.00	11/18/14
14K0721-05 [SO-86111-102714-AB-005]	B109968	1.00	11/18/14

SW-846 1010

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14K0721-01 [SO-86111-102714-AB-001]	B109973	50.0	50.0	11/18/14
14K0721-02 [SO-86111-102714-AB-002]	B109973	50.0	50.0	11/18/14
14K0721-03 [SO-86111-102714-AB-003]	B109973	50.0	50.0	11/18/14
14K0721-04 [SO-86111-102714-AB-004]	B109973	50.0	50.0	11/18/14
14K0721-05 [SO-86111-102714-AB-005]	B109973	50.0	50.0	11/18/14

SW-846 9014

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14K0721-01 [SO-86111-102714-AB-001]	B109971	25.3	250	11/18/14
14K0721-02 [SO-86111-102714-AB-002]	B109971	25.4	250	11/18/14
14K0721-03 [SO-86111-102714-AB-003]	B109971	25.2	250	11/18/14
14K0721-04 [SO-86111-102714-AB-004]	B109971	26.0	250	11/18/14
14K0721-05 [SO-86111-102714-AB-005]	B109971	25.4	250	11/18/14

SW-846 9030A

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14K0721-01 [SO-86111-102714-AB-001]	B109991	25.3	250	11/18/14
14K0721-02 [SO-86111-102714-AB-002]	B109991	25.4	250	11/18/14
14K0721-03 [SO-86111-102714-AB-003]	B109991	25.2	250	11/18/14
14K0721-04 [SO-86111-102714-AB-004]	B109991	26.0	250	11/18/14

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332**Sample Extraction Data****SW-846 9030A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
14K0721-05 [SO-86111-102714-AB-005]	B109991	25.4	250	11/18/14

SW-846 9045C

Lab Number [Field ID]	Batch	Initial [g]	Date
14K0721-01 [SO-86111-102714-AB-001]	B109943	20.0	11/18/14
14K0721-02 [SO-86111-102714-AB-002]	B109943	20.0	11/18/14
14K0721-03 [SO-86111-102714-AB-003]	B109943	20.0	11/18/14
14K0721-04 [SO-86111-102714-AB-004]	B109943	20.0	11/18/14
14K0721-05 [SO-86111-102714-AB-005]	B109943	20.0	11/18/14

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Petroleum Hydrocarbons Analyses - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B110040 - SW-846 3546

Blank (B110040-BLK1)

Prepared: 11/18/14 Analyzed: 11/19/14

CT ETPH	ND	10	mg/Kg wet							
Surrogate: o-Terphenyl	2.72		mg/Kg wet	3.33		81.5	50-150			

LCS (B110040-BS1)

Prepared: 11/18/14 Analyzed: 11/19/14

CT ETPH	25.3	10	mg/Kg wet	33.3		75.8	60-120			
Surrogate: o-Terphenyl	2.65		mg/Kg wet	3.33		79.6	50-150			

LCS Dup (B110040-BSD1)

Prepared: 11/18/14 Analyzed: 11/19/14

CT ETPH	26.7	10	mg/Kg wet	33.3		80.1	60-120	5.40	30	
Surrogate: o-Terphenyl	3.00		mg/Kg wet	3.33		90.1	50-150			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Conventional Chemistry Parameters by EPA/PHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B109943 - SW-846 9045C										
LCS (B109943-BS1)				Prepared & Analyzed: 11/18/14						
pH	6.04		pH Units	6.00		101	98.5-102			
Batch B109968 - SM21-22 2510B Modified										
Blank (B109968-BLK1)				Prepared & Analyzed: 11/18/14						
Specific conductance	ND	2.0	µmhos/cm wet							
LCS (B109968-BS1)				Prepared & Analyzed: 11/18/14						
Specific conductance	270	2.0	µmhos/cm wet	286		95.8	86.9-106			
Duplicate (B109968-DUP1)				Source: 14K0721-05		Prepared & Analyzed: 11/18/14				
Specific conductance	3.5	2.1	µmhos/cm dry		2.9			20.0	24.7	
Batch B109971 - SW-846 9014										
Blank (B109971-BLK1)				Prepared & Analyzed: 11/18/14						
Reactive Cyanide	ND	0.40	mg/Kg							
LCS (B109971-BS1)				Prepared & Analyzed: 11/18/14						
Reactive Cyanide	9.9	0.40	mg/Kg	10.0		99.4	81.3-113			
Batch B109973 - SW-846 1010										
Blank (B109973-BLK1)				Prepared & Analyzed: 11/18/14						
Flashpoint	> 212 °F		°F							
LCS (B109973-BS1)				Prepared & Analyzed: 11/18/14						
Flashpoint	81		°F	81.0		100	98.8-101			
LCS Dup (B109973-BSD1)				Prepared & Analyzed: 11/18/14						
Flashpoint	81		°F	81.0		100	98.8-101	0.00	0.264	
Batch B109991 - SW-846 9030A										
Blank (B109991-BLK1)				Prepared: 11/18/14 Analyzed: 11/19/14						
Reactive Sulfide	ND	2.0	mg/Kg							
LCS (B109991-BS1)				Prepared: 11/18/14 Analyzed: 11/19/14						
Reactive Sulfide	13	2.0	mg/Kg	14.8		86.5	24.3-135			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B110298 - % Solids

Duplicate (B110298-DUP1)

Source: 14K0721-03

Prepared: 11/21/14 Analyzed: 11/24/14

% Solids	99.1		% Wt		98.4			0.709	20	
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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
H-10	Analysis was requested after the recommended holding time had passed.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
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CTDEP ETPH in Soil

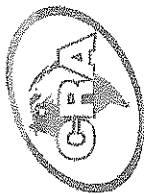
CT ETPH CT

SW-846 1010 in Soil

Flashpoint NY,NC,ME,VA,NJ

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2016
MA	Massachusetts DEP	M-MA100	06/30/2015
CT	Connecticut Department of Public Health	PH-0567	09/30/2015
NY	New York State Department of Health	10899 NELAP	04/1/2015
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2015
RI	Rhode Island Department of Health	LAO00112	12/30/2014
NC	North Carolina Div. of Water Quality	652	12/31/2014
NJ	New Jersey DEP	MA007 NELAP	06/30/2015
FL	Florida Department of Health	E871027 NELAP	06/30/2015
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2015
WA	State of Washington Department of Ecology	C2065	02/23/2015
ME	State of Maine	2011028	06/9/2015
VA	Commonwealth of Virginia	460217	12/14/2014
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2015



CONESTOGA-ROVERS
& ASSOCIATES

CHAIN OF CUSTODY RECORD

Address: 45 Farmington Valley Dr., Plainville, CT
Phone: 860-747-1800 Fax: 860-747-1900

COC NO.: 41168

PAGE 1 OF 1

(See Reverse Side for Instructions)

Project No/Phase/Task Code: 08611-20		Laboratory Name: Con-test		Lab Location:		SSOW ID: 08611-001	
Project Name: Hawthorne Substation Phase II		Lab Contact: Jim Geo-antos		Lab Quote No.:		Cooler No.:	
Project Location: Fairfield CT		SAMPLE TYPE		CONTAINER QUANTITY & PRESERVATION		Carrier:	
Chemistry Contact: Kathy Shaw		Matrix Code (see back of COC)		Grab (G) or Comp (C)		ANALYSIS REQUESTED (See Back of COC for Definitions)	
Sampler(s): Alex Briffington		DATE (month/day)		TIME (hh:mm)		MS/MSD Request	
SAMPLE IDENTIFICATION (Continuation for each sample; may be continued on next page)		DATE (month/day)		TIME (hh:mm)		COMMENTS/ SPECIAL INSTRUCTIONS:	
1 SO-8611-102714-AB-001		01		10/27/14 9:15		Total + SPLP	
2 SO-8611-102714-AB-002		02		10/30 10:30		REPA 8 mottle	
3 SO-8611-102714-AB-003		03		11:00 11:00		(SPLP)	
4 SO-8611-102714-AB-004		04		11:25 11:25		Additional analysis requested 10/27	
5 SO-8611-102714-AB-005		05		12:30 12:30		OK to run post hold 10/27	
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TOF-3-B

Table of Contents

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com



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Sample Receipt Checklist

CLIENT NAME: Conestoga - Rivers and Associates RECEIVED BY: JDL DATE: 10/28/14

1) Was the chain(s) of custody relinquished and signed? Yes No No CoC Included

2) Does the chain agree with the samples? Yes No

If not, explain:

3) Are all the samples in good condition? Yes No

If not, explain:

4) How were the samples received:

On Ice ☒ Direct from Sampling ☐ Ambient ☐ In Cooler(s) ☒

Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A

Temperature °C by Temp blank _____ Temperature °C by Temp gun 5.4

5) Are there Dissolved samples for the lab to filter? Yes No

Who was notified _____ Date _____ Time _____

6) Are there any RUSH or SHORT HOLDING TIME samples? Yes No

Who was notified _____ Date _____ Time _____

7) Location where samples are stored:

19

Permission to subcontract samples? Yes No
(Walk-in clients only) if not already approved
Client Signature: _____

8) Do all samples have the proper Acid pH: Yes No N/A

9) Do all samples have the proper Base pH: Yes No N/A

10) Was the PC notified of any discrepancies with the CoC vs the samples: Yes No N/A

Containers received at Con-Test

	# of containers		# of containers
1 Liter Amber		8 oz amber/clear jar	<u>1</u>
500 mL Amber		4 oz amber/clear jar	
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic		Plastic Bag / Ziploc	
500 mL Plastic		SOC Kit	
250 mL plastic		Non-ConTest Container	
40 mL Vial - type listed below	<u>15</u>	Perchlorate Kit	
Colisure / bacteria bottle		Flashpoint bottle	
Dissolved Oxygen bottle		Other glass jar <u>16oz Amb</u>	<u>5</u>
Encore		Other	

Laboratory Comments:

40 mL vials: # HCl _____ # Methanol 5

Doc# 277 # Bisulfate _____ # DI Water 10

Rev. 4 August 2013 # Thiosulfate _____ Unpreserved _____

Time and Date Frozen:

10/28/14 9:50 JDL
16:55

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Page 2 of 2

Login Sample Receipt Checklist

(Rejection Criteria Listing - Using Sample Acceptance Policy)

Any False statement will be brought to the attention of Client

Question	Answer (True/False)	Comment
	T/F/NA	
1) The cooler's custody seal, if present, is intact.	NA	
2) The cooler or samples do not appear to have been compromised or tampered with.	T	
3) Samples were received on ice.	T	
4) Cooler Temperature is acceptable.	T	
5) Cooler Temperature is recorded.	T	
6) COC is filled out in ink and legible.	T	
7) COC is filled out with all pertinent information.	T	
8) Field Sampler's name present on COC.	T	
9) There are no discrepancies between the sample IDs on the container and the COC.	T	
10) Samples are received within Holding Time.	T	
11) Sample containers have legible labels.	T	
12) Containers are not broken or leaking.	T	
13) Air Cassettes are not broken/open.	NA	
14) Sample collection date/times are provided.	T	
15) Appropriate sample containers are used.	T	
16) Proper collection media used.	T	
17) No headspace sample bottles are completely filled.	T	
18) There is sufficient volume for all requested analyses, including any requested MS/MSDs.	T	
19) Trip blanks provided if applicable.	NA	
20) VOA sample vials do not have head space or bubble is <6mm (1/4") in diameter.	NA	
21) Samples do not require splitting or compositing.	T	

Doc #277 Rev. 4 August 2013

Who notified of False statements?

Log-In Technician Initials:

JDL

Date/Time:

Date/Time: 10/28/14 9:50

JDL

16:55

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D:\HPCHEM\1\DATA\A111914.SEC\A1119031.D

CT ETPH DISCRIMINATION CHECK

Date Acquired 11/19/14
Data File Name A1119031.D
Sample Name ETPH 1500
Instrument Name 5890DFID

Compound	Ret Time	Target Response	Average Response	*%D +/- 20
c - 9	1.30	470977	492116	-4
c - 10	1.65	479715	492116	-3
c - 12	2.39	490176	492116	0
c - 14	3.07	501603	492116	2
c - 16	3.67	510158	492116	4
c - 18	4.31	502345	492116	2
o-Terphenyl	4.61	605035	492116	
c - 20	4.91	505531	492116	3
c - 22	5.41	502954	492116	2
c - 24	5.86	495221	492116	1
c - 26	6.25	493247	492116	0
c - 28	6.61	484875	492116	-1
c - 30	6.94	488514	492116	-1
c - 32	7.26	479073	492116	-3
c - 34	7.55	483811	492116	-2
c - 36	7.91	493545	492116	0

* One compound allowed %D <= 50%

Samples

14K0721-01
14K0721-02
14K0721-03
14K0721-04
14K0721-05



TOF-3-B

REASONABLE CONFIDENCE PROTOCOL

LABORATORY ANALYSIS QA/QC CERTIFICATION FORM

Laboratory Name: Con-Test Analytical Laboratory

Client: United Illuminating Company

Project Location: Hawthorne Substation Phase II - Fairfield,

Project Number: 14K0721

Laboratory Sample ID(s): CT

Sample Date(s):

14K0721-01 thru 14K0721-05

10/27/2014

List RCP Methods Used:

CTDEP ETPH

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the CTDEP method-specific Reasonable Confidence Protocol documents?	☒ Yes ☐ No
1A	Were the method specified preservation and holding time requirements met?	☐ Yes ☒ No
1B	VPH and EPH Methods only: Was the VPH and EPH method conducted without significant modifications (see Section 11.3 of respective RCP methods)?	☐ Yes ☐ No ☒ N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	☒ Yes ☐ No
3	Were samples received at an appropriate temperature (< 6 degrees C.)?	☒ Yes ☐ No ☐ N/A
4	Were all QA/QC performance criteria specified in the CTDEP Reasonable Confidence Protocol documents achieved?	☒ Yes ☐ No
5A	Were reporting limits specified or referenced on the chain-of-custody?	☒ Yes ☐ No
5B	Were these reporting limits met?	☐ Yes ☐ No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the Reasonable Confidence Protocol documents?	☒ Yes ☐ No
7	Are project-specific matrix spikes and laboratory duplicates included in this data set?	☒ Yes ☐ No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information must be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Reasonable Confidence."

This form may not be altered and all questions must be answered.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete.

Authorized Signature:
Reporting
Position: Manager, Laboratory
Printed Name: Johanna K. Harrington
Date: 11/24/14

This certification form is to be used for RCP methods only.