



Environmental Resources Group

Assessment • Remediation • Compliance • Risk Management

SITE UPDATE REPORT

RACER TRUST

DAVISON ROAD LANDFILL (12920)
DAVISON AND DONNEGAL ROAD
BURTON, MI

Prepared for:

RACER TRUST
500 WOODWARD AVENUE, SUITE 1510
DETROIT, MICHIGAN 48226

PREPARED BY:

ENVIRONMENTAL RESOURCES GROUP, LLC
28003 CENTER OAKS COURT, SUITE 106
WIXOM, MI 48393
248-773-7986
ERG PROJECT NO.: 1119.001

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1.0 INTRODUCTION AND BACKGROUND

1.1. INTRODUCTION

Environmental Resources Group, LLC (ERG) has prepared this Site Update Report on behalf of RACER Trust for the Davison Road Landfill property (the "Site") located in Burton, Michigan. Refer to Figure 1 for the Site Location Map.

1.2 SITE DESCRIPTION AND PHYSICAL SETTING

The Site is a 56 acre irregular-shaped parcel bordered by Davison Road and several commercial businesses to the north, undeveloped land to the east, a Grand Trunk railroad line to the south, and a Consumer's Power company right-of-way and Delphi plant to the west. The Site is relatively flat on the central and eastern portion of the Site. The topography slopes significantly on the western portion of the Site. The Gilkey Creek is located in the western portion of the Site and runs in a north to south direction. An unnamed intermittent drainage ditch is located south of the Site. The ditch flows from east to west and drains into the Gilkey Creek. The Site is heavily vegetated in most areas. The vegetation consists of grasses to dense scrubby brush and wooded areas.

1.3 BACKGROUND

In the 1970s, portions of the Site were used as a permitted landfill by the GM Buick Motor Division facility in Flint, Michigan. GM disposed of construction debris, miscellaneous inert solid waste, and foundry sand. Site investigations including soil and groundwater assessment have been performed at the Site from 1996 through November 2011.

The historical analytical results of the soil and groundwater samples from previous investigations indicate the presence of various volatile organic compounds (VOCs), semi-VOCs (SVOCs) and metals at concentrations that exceed Michigan Department of Environmental Quality (MDEQ) Part 201 residential and non-residential cleanup criteria for direct contact, drinking water and drinking water protection, groundwater surface water interface, and/or groundwater surface water interface protection. Additionally, several metals concentrations exceeded the Statewide Default Screening Levels.

ERG, in affiliation with Wilcox Professional Services (WPS) prepared an Investigative Work Plan (IWP) dated May 22, 2012 to address gaps in the existing data. The investigation activities in the IWP included:

- Installation of 28 soil borings and collection of 30 soil samples;
- Installation of 15 groundwater monitoring wells;
- Groundwater monitoring well and surface water sampling;
- Aquifer tests and analysis; and,

- Property boundary and topographic surveys

In July 2012, 28 soil borings and 15 monitoring wells were installed at the Site. Soil borings were advanced to evaluate gaps in the previous data obtained and to further define of extent of impacted soils identified in the previous investigations. Additional monitoring wells were installed to evaluate groundwater flow direction and the extent of groundwater impact at the Site. The methodology and results of this investigation is described below.

2.0 SITE INVESTIGATION METHODOLOGY

2.1 SOIL BORING INSTALLATION

On July 16 to July 20, 2012, an ERG geologist was on-Site to observe the soil boring installation, collect soil samples, and to document soil conditions. The soil borings were described in accordance with the Unified Soil Classification System including color, grain size, predominant soil type, odor, moisture, and visual contaminant impact. A photoionization detector (PID) was used to monitor the volatile organic vapor content in the soil. Soil description, PID readings, and other pertinent observations including any visual evidence of contamination (e.g., staining, odor, sheen, etc.) were recorded in a field logbook. Soil boring logs are included as Appendix A.

All drilling and sampling equipment was decontaminated prior to drilling each boring with a solution of non-phosphate soap and control water followed by a control water rinse.

Discrete soil samples were collected at the interval exhibiting the highest PID readings or noticeable physical impact. Soils that did not exhibit elevated PID readings or physical impact, were sampled from the interval above the water table surface. Up to two samples were collected from each boring location.

A total of 30 soil samples were collected for laboratory analysis. Soil samples were submitted to Merit Laboratory and analyzed for VOCs, metals and SVOCs or PNAs utilizing USEPA methodology.

Soil sample collection and analysis was performed according to appropriate regulatory methodologies and in accordance with the IWP, with appropriate QA/QC samples. Soils samples were submitted to Merit Laboratory for analysis of VOCs, polynuclear aromatic hydrocarbons (PNAs) or SVOCs and selected metals (aluminum, arsenic, cadmium, chromium, cobalt, copper, mercury, iron, manganese, vanadium, and zinc).

2.2 MONITORING WELL INSTALLATION

The monitoring wells were installed such that the well screen interval intersects the water table surface at the time of drilling. The monitoring wells were installed after soil boring installation. Two-inch diameter Schedule 40 PVC riser and 0.010-inch slotted five-foot screens were installed in the soil borings. The boring annulus was filled with sand filter pack to approximately 0.5 foot above the screen, then with hydrated bentonite chips to one foot below the surface. The wells were finished with a stickup locking protective steel well. After installation, the monitoring wells were developed to establish communication between the aquifer material and the well screen interval. The entire well screen interval was developed using the "surge and purge" method through use of a submersible pump. Refer to Figure 2 for the Soil Boring/Monitoring Well Location Map. Well Construction Diagrams are included as Appendix A.

2.3 GROUNDWATER AND SURFACE WATER SAMPLING

Groundwater and surface water samples were collected in August 2012, November 2012, April 2013, and July 2013. Prior to groundwater sampling, depth to groundwater measurements were collected with an electronic water level meter. Samples were collected using the low-flow sampling method. Water quality parameters including pH, specific conductivity, temperature, dissolved oxygen, oxidation-reduction potential, and turbidity were recorded during purging until the readings stabilize within 10% prior to sample collection. Static groundwater elevation data is included in Appendix B.

A maximum of six samples were collected from the Gilkey Creek and the drainage ditch. Three sampling points (upstream, mid-stream and downstream) were established for both the Gilkey Creek and drainage ditch.

Groundwater and surface water samples were submitted to Merit Laboratory for analysis for VOCs, SVOCs, select metals (aluminum, arsenic, cadmium, chromium, cobalt, copper, iron, manganese, vanadium, and zinc) and mercury. Groundwater sampling and analysis was performed in accordance with regulatory methodologies and in accordance with the IWP, with appropriate QA/QC samples.

2.4 AQUIFER TESTING

In September 2012 ERG conducted slug testing on monitoring wells (MW) MW-5-12, MW-9-12 and MW-12-12 in order to further evaluate groundwater flow parameters, such as hydraulic conductivity (K) and rate of flow. The test results were analyzed according to the Bouwer and Rice (1976) method for unconfined aquifers.

2.5 SITE BOUNDARY AND TOPOGRAPHIC SURVEY

A comprehensive boundary and topographic survey of the Site was conducted to develop a base diagram to depict pertinent sample locations and features, including historic fill limits, areas below the 100-year flood elevation of Gilkey Creek, wetlands, monitoring wells, etc.

3.0 INVESTIGATION RESULTS

3.1 SOIL RESULTS

Soils encountered during drilling consisted of native silt and clay, with some sand layers. Fill material, including foundry sand, slag, and other debris was encountered in the upper 4 feet in borings within the landfill area. Soil boring logs are included as Appendix A.

Based on the potential future use and probable land use restrictions, the analytical results were compared to the MDEQ Part 201 Non-Residential Cleanup Criteria to evaluate the exposure pathways. Analytical results identified concentrations of naphthalene above the Non-Residential Groundwater /Surface Water Interface Protection (GSIP) criteria in SB-26-12 (3-4'). Soil collected from SB-25-12 (11-12') contained concentrations of ethylbenzene above the GSIP criteria and styrene above the Drinking Water protection (DWP) criteria and the GSIP criteria. Analytical results of soil sampled from SB-27-12 (2-3') identified concentrations of tetrachloroethylene (PCE) above the DWP and DWP criteria, trichloroethylene (TCE) above the DWP criteria; and fluoranthene and phenanthrene above the GSIP criteria. No other SVOCs or VOCs were detected above the non-residential cleanup criteria.

Concentrations of metals were detected in all samples submitted for laboratory analysis. Concentrations of metals including aluminum, arsenic, cobalt, iron and manganese exceeded the DWP criteria.

Concentrations of arsenic, cobalt and mercury exceeded the GSIP criteria. Analysis also detected concentrations of all metals except vanadium above the Statewide Default Background Levels in several soil borings. A summary of the data compared to the non-residential criteria has been included in Tables 1 through 3. Figure 3 has been included depicting concentrations of metals, VOCs and PNAs above the statewide default background level and the GSIP criteria. Soil analytical reports have been included in Appendix C.

3.2 GROUNDWATER AND SURFACE WATER RESULTS

The groundwater elevation data is presented in Appendix B. As shown in the groundwater gradient Figures 5 through 8, groundwater flows towards the Gilkey Creek on the southern portion of the Site and radially on the northern portion of the Site. Based on the slug test data collected the average K value was estimated to 2.4×10^{-4} cm/sec.

Laboratory of analysis of groundwater and surface water did not identify concentrations of VOCs, SVOCs or PNAs above the laboratory detection limit in any of the samples analyzed. Laboratory analysis identified several metal concentrations total including arsenic, iron, manganese and vanadium above the nonresidential drinking water criteria in several wells. Concentrations of arsenic were detected above the GSIP criteria in monitoring wells MW-1-12, MW-2, MW-3-12, MW-4-12, MW-6-12,

MW-8-12, MW-9-12, MW-10-12, MW-12-12 and D-3-East (drainage ditch – upstream). Refer to Figure 4 for Arsenic Concentrations in Groundwater above the GSIP.

4.0 SUMMARY OF FINDINGS

Based on the results of this investigation, the extent of soil impacted with VOCs, SVOC and metals have been defined. The analytical results of the soil and groundwater identified several VOC and SVOC concentrations above the non-residential cleanup criteria in soil and groundwater. In addition, there are several metal concentrations that exceed the State Default Background Level. However, a review of the Michigan Background Soil Survey (2005) indicates that the concentrations are within the "typical range of values" for soil. In addition, the some of the highest concentrations detected are within the non-impacted and undisturbed areas of the Site. Therefore, these concentrations are believed to be naturally occurring.

Analytical results of groundwater did not identify concentrations of VOCs or SVOCs in any of the groundwater samples analyzed. Several total metals were identified in the groundwater at the Site above the GSIP and Non-Residential DWP criteria.

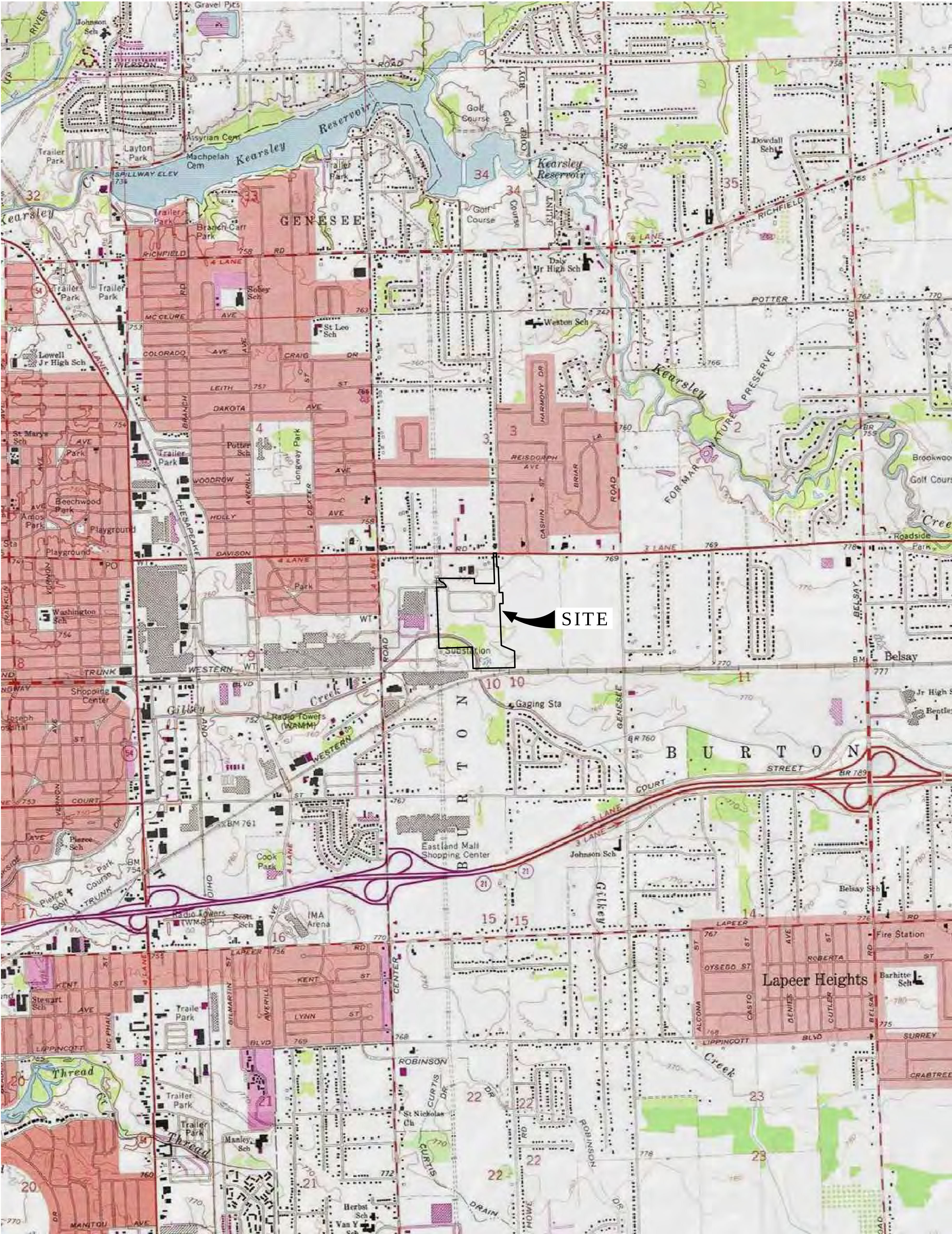
5.0 CONCLUSIONS AND RECOMMENDATIONS

The relevant exposures at the Site include GSIP, non-residential DWP and non-residential DW. ERG believes that the DWP and DW pathway can be eliminated by implementing a restrictive covenant (RC) prohibiting the use of potable water and that requiring that the property remain non-residential.

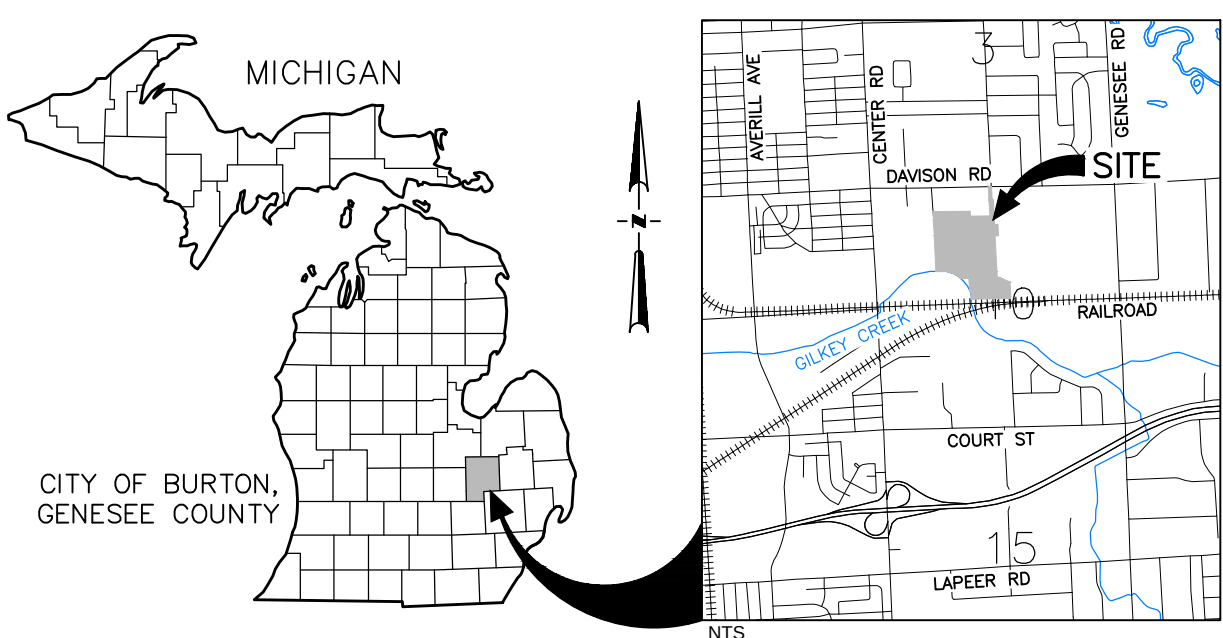
The remaining complete exposure pathway is GSIP to the Gilkey Creek which is part of the Flint River drainage basin. ERG believes that this pathway can be eliminated by demonstrating that any concentrations on Site will dilute to concentrations below the applicable cleanup criteria.

Based on the information, ERG believes that the contaminant exceedances can be addressed to close exposure pathways. ERG recommends completing a report demonstrating the need for no further action through the use a RC and using mixing zone calculations that show the concentrations will dilute prior to reaching a surface water body. ERG believes a meeting with the MDEQ would be beneficial to discuss the proposed approach to achieve closure prior to preparing a report. ERG anticipates that a meeting can be scheduled in January/February, 2014 to discuss the Site. If the MDEQ agrees with the approach, ERG will complete a report in conjunction with the RC with an anticipated submittal date of July, 2014. The proposed report and RC is included as part of the approved 2014 budget.

FIGURES



LOCATION MAP



SITE LOCATION MAP

RACER TRUST
DAVISON ROAD LANDFILL – BURTON, MICHIGAN

PREPARED BY:



ERG Environmental Resources Group
28093 Center Oaks Court • Suite 106 • Wixom, MI • 48393
Phone: 248-773-7986 • Fax: 248-924-3108

FIGURE
1

DRWG. by : MA
CHECK :
DATE : 11/22/2013
DWG: 12-068_Figures
SHEET : 1 OF 8

CONT. INT.: N/A
FIELD : MD/SM/LB
V. SCALE : N/A
SCALE: 1"=150'
JOB#: 12-068

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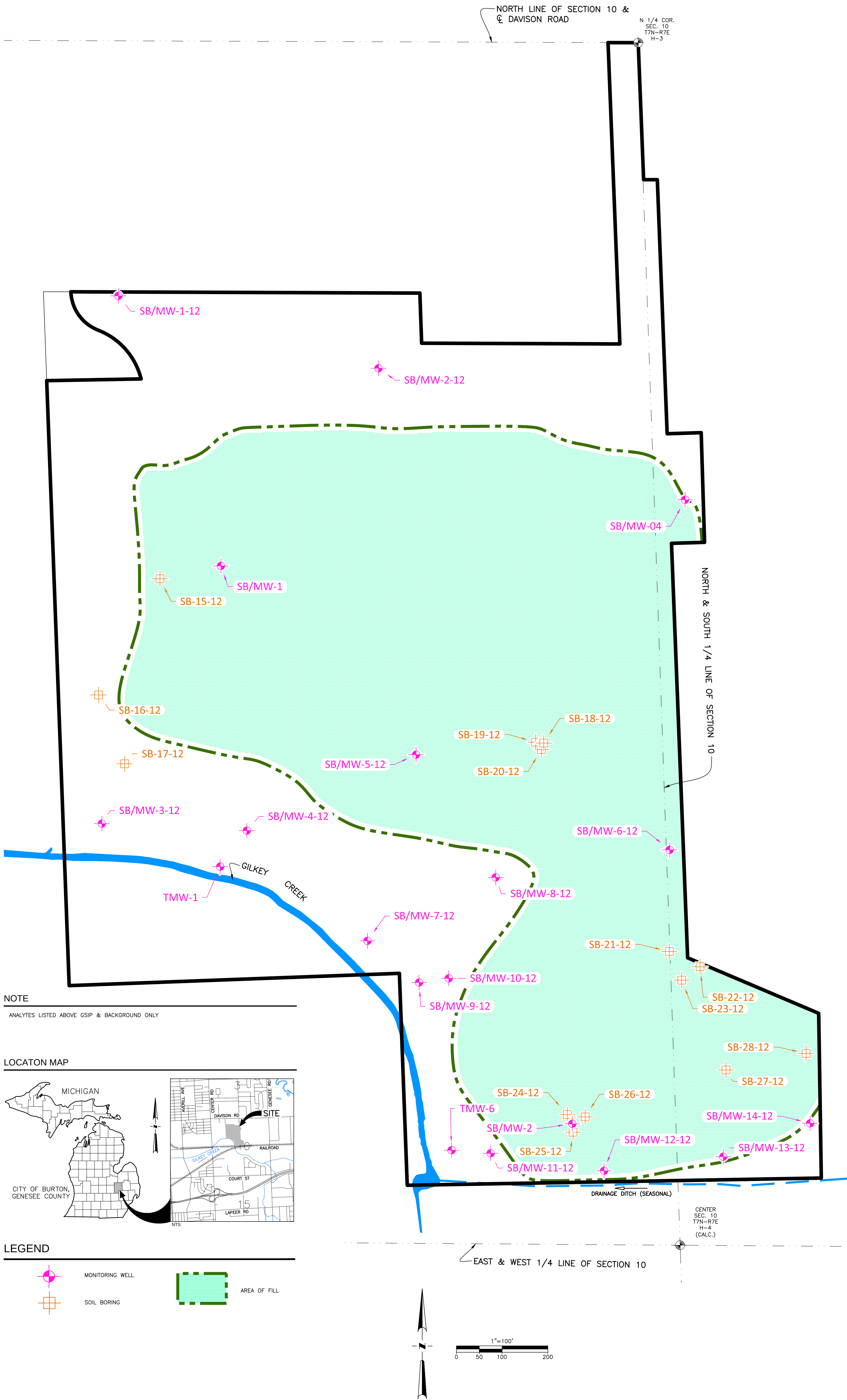


FIGURE
2

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CHECK :
DATE : 11/22/2013
DWG: 12-068_Figures
SHEET : 2 OF 8

CONT. INT.: N/A
FIELD : MD/SM/LB
V. SCALE : N/A
SCALE: 1"=150'
JOB# :12-068

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SITE MAP

RACER TRUST
DAVISON ROAD LANDFILL - BURTON, MICHIGAN

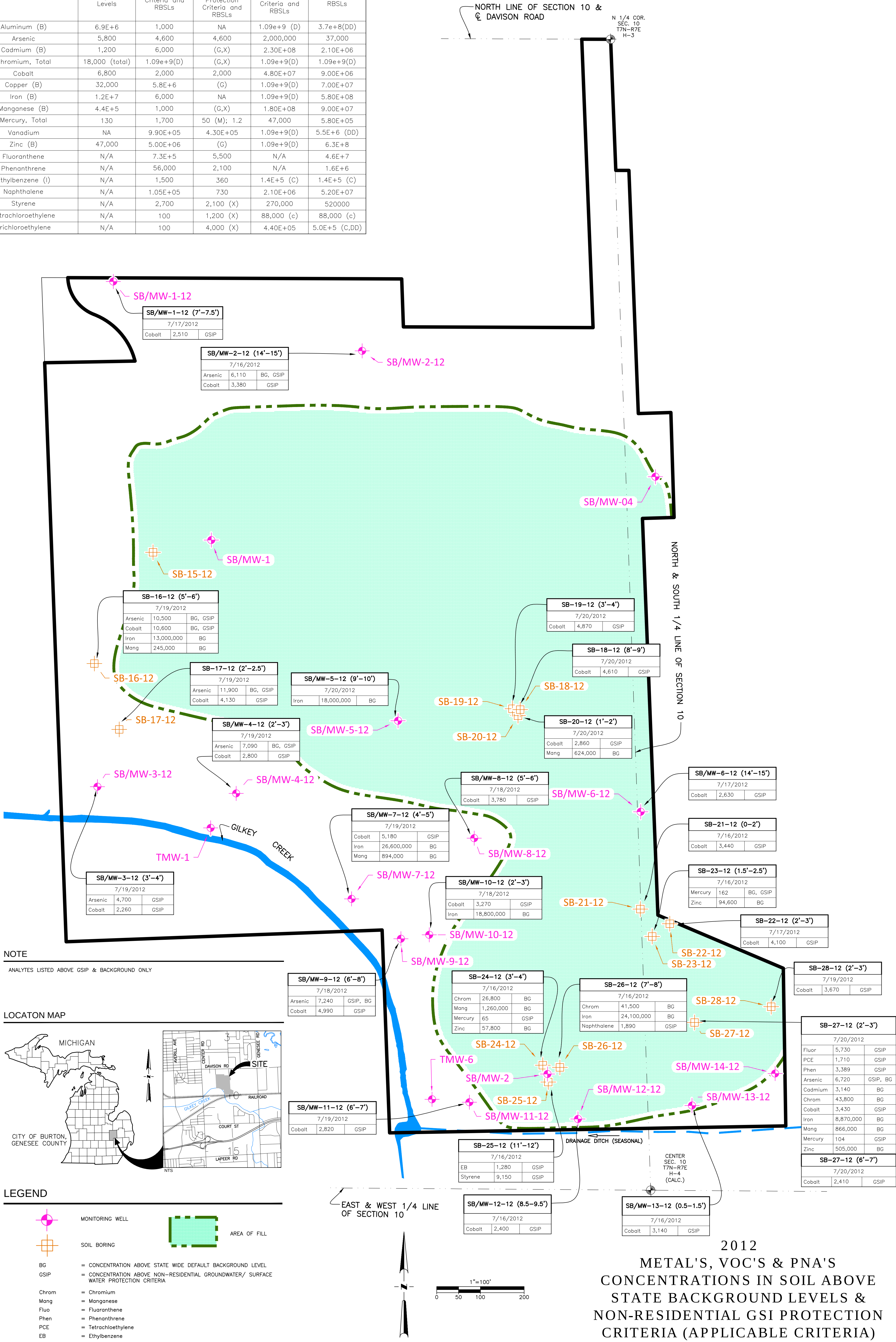
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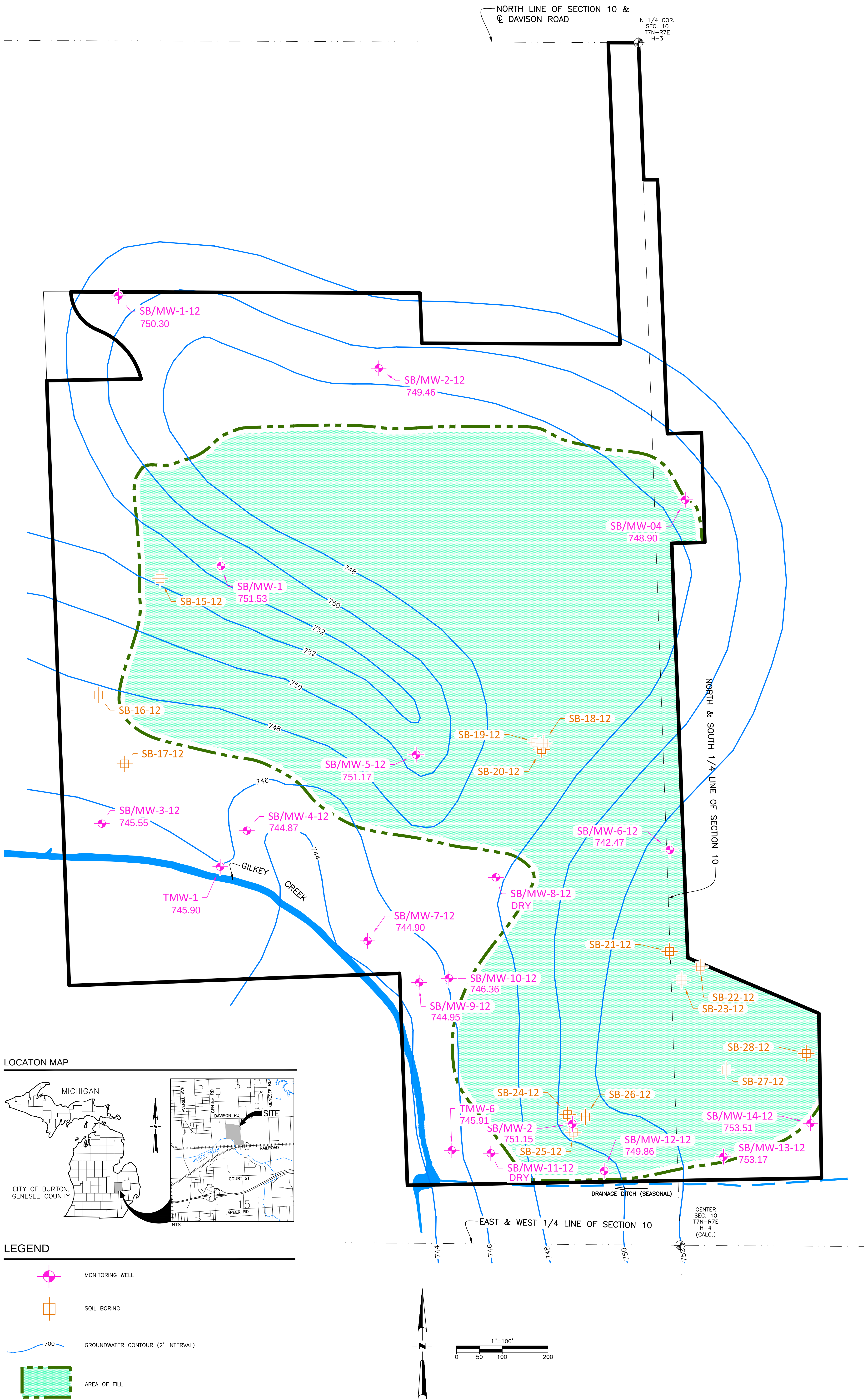
Environmental Resources Group
28003 Center Oaks Court • Suite 106 • Wixom, MI • 48393
Phone: 248-773-7986 • Fax: 248-924-3108

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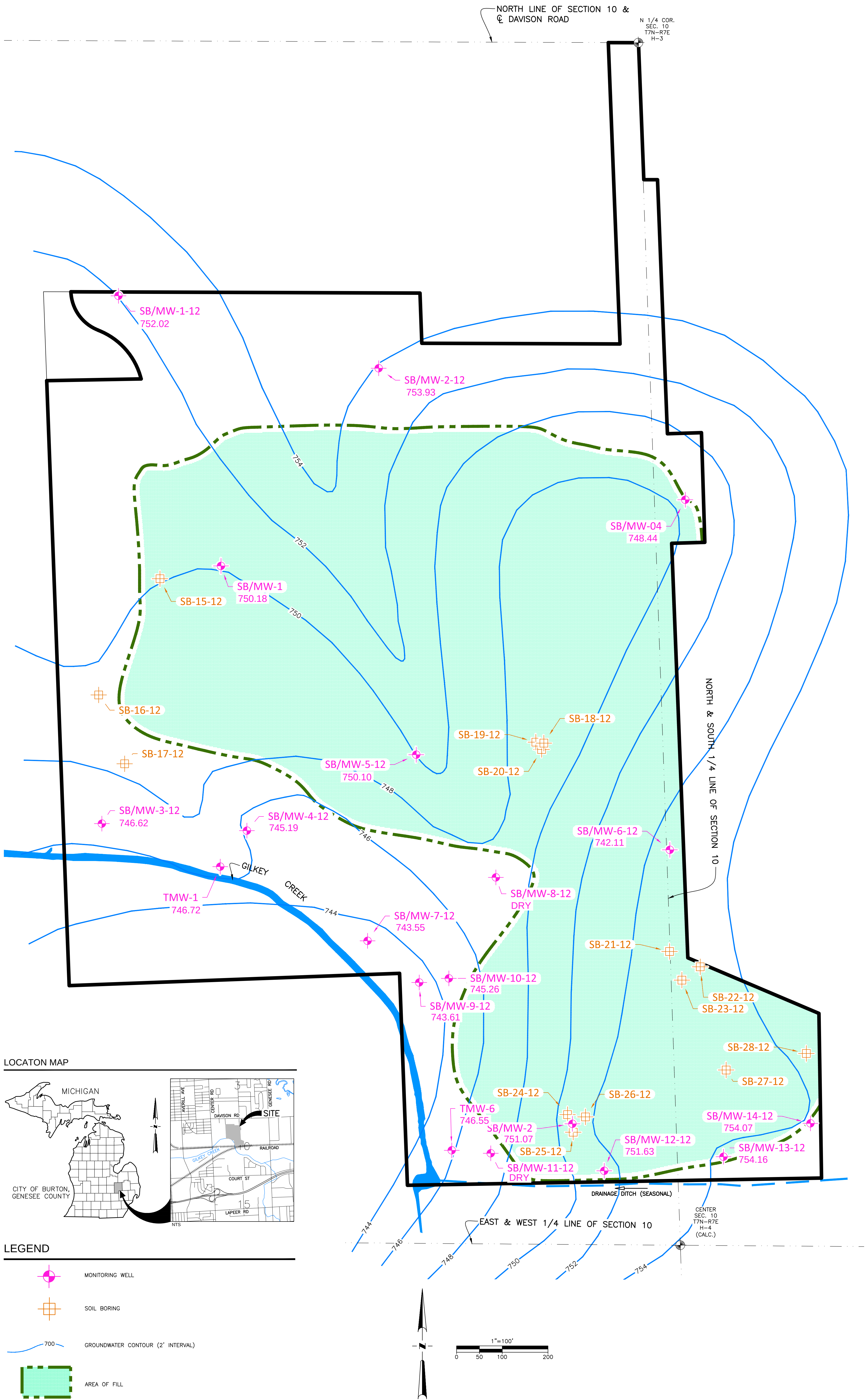
NON-RESIDENTIAL CRITERIA					
Constituent	Statewide Default Background Levels	Non-Residential Drinking Water Protection Criteria and RBSLs	Non-Residential Groundwater Surface Water Interface Protection Criteria and RBSLs	Non-Residential Groundwater Contact Protection Criteria and RBSLs	Non-Residential Direct Contact Protection Criteria and RBSLs
Aluminum (B)	6.9E+6	1,000	NA	1.09E+9 (D)	3.7E+8 (DD)
Arsenic	5,800	4,600	4,600	2,000,000	37,000
Cadmium (B)	1,200	6,000	(G,X)	2.30E+08	2.10E+06
Chromium, Total	18,000 (total)	1.09E+9 (D)	(G,X)	1.09E+9 (D)	1.09E+9 (D)
Cobalt	6,800	2,000	2,000	4.80E+07	9.00E+06
Copper (B)	32,000	5.8E+6	(G)	1.09E+9 (D)	7.00E+07
Iron (B)	1.2E+7	6,000	NA	1.09E+9 (D)	5.80E+08
Manganese (B)	4.4E+5	1,000	(G,X)	1.80E+08	9.00E+07
Mercury, Total	130	1,700	50 (M); 1.2	47,000	5.80E+05
Vanadium	NA	9.90E+05	4.30E+05	1.09E+9 (D)	5.5E+6 (DD)
Zinc (B)	47,000	5.00E+06	(G)	1.09E+9 (D)	6.3E+8
Fluoranthene	N/A	7.3E+5	5,500	N/A	4.6E+7
Phenanthrene	N/A	56,000	2,100	N/A	1.6E+6
Ethylbenzene (I)	N/A	1,500	360	1.4E+5 (C)	1.4E+5 (C)
Naphthalene	N/A	1.05E+05	730	2.10E+06	5.20E+07
Styrene	N/A	2,700	2,100 (X)	270,000	520,000
Tetrachloroethylene	N/A	100	1,200 (X)	88,000 (c)	88,000 (c)
Trichloroethylene	N/A	100	4,000 (X)	4.40E+05	5.0E+5 (C,DD)



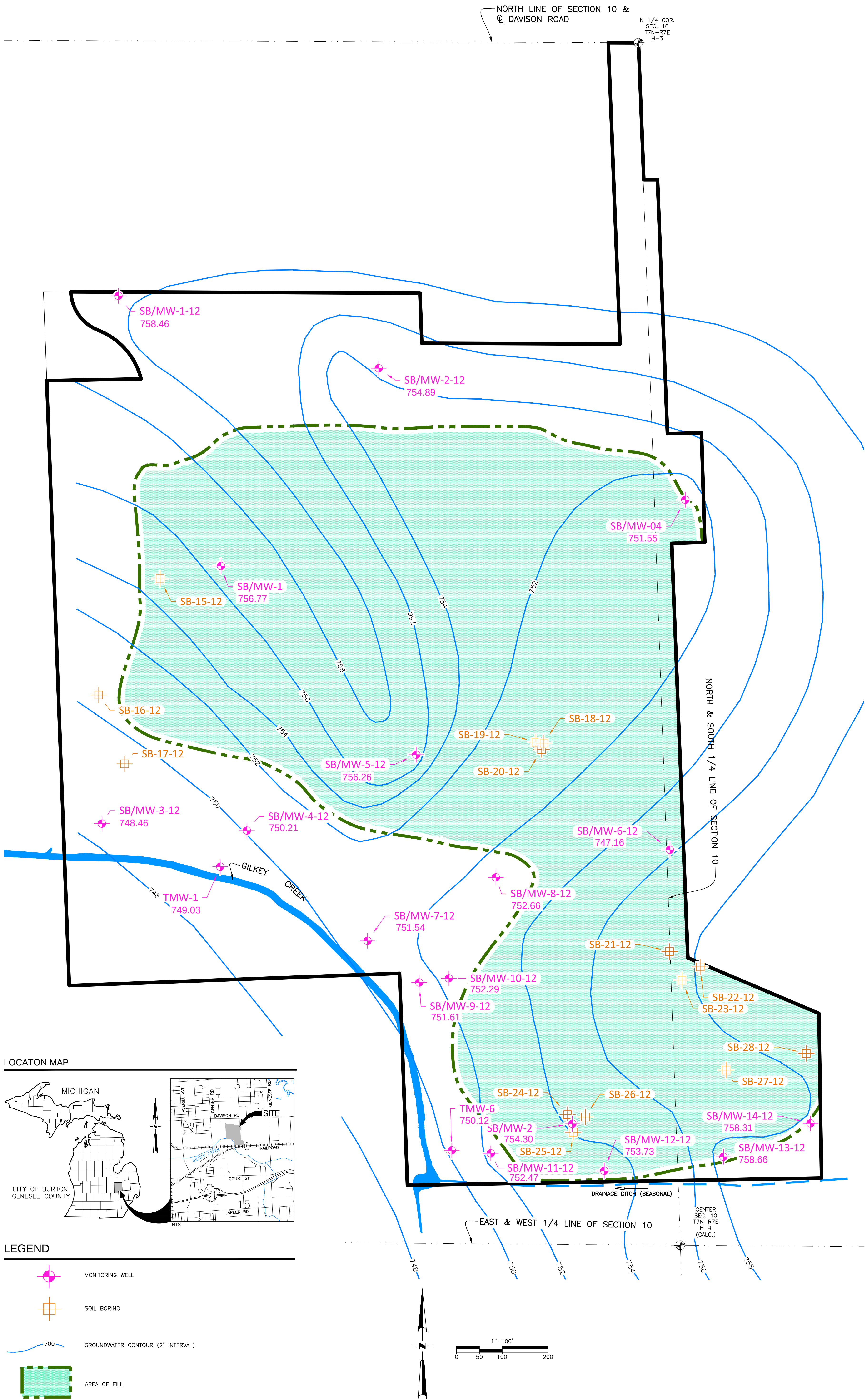
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TABLES

Table 1 Summary of Soil Analytical Results - Metals-
July 2012
RACER Trust - Davison Road Landfill
Burton, Michigan

Sample ID Sample Depth Sample Date	Statewide Default Background Levels	Non-Residential Drinking Water Protection Criteria and RBSLs	Non-Residential Groundwater Surface Water Interface Protection Criteria and RBSLs	Non-Residential Groundwater Contact Protection Criteria and RBSLs	Non-Residential Direct Contact Criteria and RBSLs	SB/MW-2-12 (14'-15') 07/16/2012	SB-24-12 (3'-4') 07/16/2012	SB-26-12 (7'-8') 07/16/2012	Duplicate 1 07/16/2012	SB/MW-1-12 (7'-7.5') 07/17/2012	SB-25-12 (11'-12') 07/17/2012	SB/MW-14-12 (6.5'-7') 07/17/2012	SB-21-12 (0'-2') 07/17/2012	SB/MW-13-12 (0.5'-1.5') 07/17/2012	Duplicate 2 07/17/2012	SB-23-12 (1.5'-2.5') 07/17/2012
Metals ug/Kg																
Aluminum (B)	6.9E+6	1,000	NA	1.09e+9 (D)	3.7e+8(DD)	885,000	3,070,000	809,000	479,000	2,440,000	2,070,000	1,260,000	1,910,000	2,310,000	1,870,000	1,470,000
Arsenic	5,800	4,600	4,600	2,000,000	37,000	6,110	2,570	1,120	790	1,400	610	1,140	1,270	1,580	2,400	1,680
Cadmium (B)	1,200	6,000	(G,X)	2.30E+08	2.10E+06	<200	310	<200	<200	<200	<200	<200	<200	<200	280	590
Chromium, Total	18,000 (total)	1.09e+9(D)	(G,X)	1.09e+9(D)	1.09e+9(D)	2,820	26,800	41,500	21,200	3,500	2,210	2,520	2,730	2,680	3,250	10,600
Cobalt	6,800	2,000	2,000	4.80E+07	9.00E+06	3,380	1,800	1,870	1,050	2,510	1,740	1,970	3,440	3,140	2,200	1,710
Copper (B)	32,000	5.8E+6	(G)	1.09e+9(D)	7.00E+07	9,300	24,600	24,400	9,860	5,490	4,920	2,040	2,680	5,810	6,770	22,600
Iron (B)	1.2E+7	6,000	NA	1.09e+9(D)	5.80E+08	7,880,000	5,570,000	24,100,000	14,100,000	3,050,000	3,380,000	2,230,000	2,980,000	7,190,000	3,380,000	6,540,000
Manganese (B)	4.4E+5	1,000	(G,X)	1.80E+08	9.00E+07	390,000	1,260,000	302,000	125,000	109,000	101,000	220,000	315,000	297,000	271,000	378,000
Mercury, Total	130	1,700	50 (M); 1.2	47,000	5.80E+05	<50	65	<50	<50	<50	<50	<50	<50	<50	<50	162
Vanadium	NA	9.90E+05	4.30E+05	1.09e+9(D)	5.5E+6 (DD)	6,170	10,300	4,020	2,590	5,460	6,050	3,770	5,350	6,310	5,590	3,890
Zinc (B)	47,000	5.00E+06	(G)	1.09e+9(D)	6.3E+8	24,200	57,800	11,300	17,800	15,100	15,200	7,870	8,030	22,100	33,100	94,600

Analytical results compared to the MDEQ Part 201 Non-Residential Cleanup Criteria

Bold-exceeds the Drinking Water Criteria

Shaded -Exceeds the GSIP Criteria

Underlined exceeds the Statewide Default Background Levels

Italic-Exceeds Groundwater Protection Criteria

Exceeds Direct Contact

Table 1 Summary of Soil Analytical Results - Metals-
July 2012
RACER Trust - Davison Road Landfill
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Sample ID Sample Depth Sample Date	Statewide Default Background Levels	Non-Residential Drinking Water Protection Criteria and RBSLs	Non-Residential Groundwater Surface Water Interface Protection Criteria and RBSLs	Non-Residential Groundwater Contact Protection Criteria and RBSLs	Non-Residential Direct Contact Criteria and RBSLs	SB/MW-12-12 (8.5'-9.5') 07/17/2012	SB-22-12 (2'-3') 07/17/2012	SB/MW-6-12 (14'-15') 07/17/2012	SB/MW-10-12 (2'-3') 07/18/2012	SB/MW-9 -12 (6'-8') 07/18/2012	SB/MW-8-12 (5'-6') 07/18/2012	SB/MW-7-12 (4'-5') 07/19/2012	SB/MW-4-12 (2'-3') 07/19/2012	SB/MW-4-12 (2'-3') DUP 07/19/2012	SB-16-12 (5'-6') 07/19/2012	SB-17-12 (2'-2.5') 07/19/2012
Metals ug/Kg																
Aluminum (B)	6.9E+6	1,000	NA	1.09e+9 (D)	3.7e+8(DD)	3,040,000	2,190,000	2,330,000	3,360,000	2,680,000	3,640,000	5,590,000	1,740,000	2,550,000	4,150,000	2,050,000
Arsenic	5,800	4,600	4,600	2,000,000	37,000	2,160	1,830	1,680	4,970	7,240	2,310	680	7,090	11,800	10,500	11,900
Cadmium (B)	1,200	6,000	(G,X)	2.30E+08	2.10E+06	290	<200	260	<200	<200	<200	<200	250	350	<200	210
Chromium, Total	18,000 (total)	1.09e+9(D)	(G,X)	1.09e+9(D)	1.09e+9(D)	4,170	2,760	3,300	5,070	5,940	5,140	5,180	3,760	5,220	7,500	3,420
Cobalt	6,800	2,000	2,000	4.80E+07	9.00E+06	2,400	4,100	2,630	3,270	4,990	3,780	5,180	2,800	4,390	10,600	4,130
Copper (B)	32,000	5.8E+6	(G)	1.09e+9(D)	7.00E+07	9,790	2,340	9,550	7,080	14,300	5,290	10,200	9,130	14,400	9,630	5,780
Iron (B)	1.2E+7	6,000	NA	1.09e+9(D)	5.80E+08	5,960,000	3,540,000	3,930,000	18,800,000	10,000,000	5,350,000	26,600,000	2,700,000	4,010,000	13,000,000	4,890,000
Manganese (B)	4.4E+5	1,000	(G,X)	1.80E+08	9.00E+07	247,000	331,000	115,000	268,000	333,000	232,000	894,000	215,000	245,000	1,780,000	343,000
Mercury, Total	130	1,700	50 (M); 1.2	47,000	5.80E+05	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Vanadium	NA	9.90E+05	4.30E+05	1.09e+9(D)	5.5E+6 (DD)	10,400	6,550	9,220	10,600	11,100	12,000	11,200	9,620	13,500	14,200	13,200
Zinc (B)	47,000	5.00E+06	(G)	1.09e+9(D)	6.3E+8	21,600	9,520	17,000	22,300	19,100	14,200	25,400	15,500	22,300	34,200	19,400

Analytical results compared to the MDEQ Part 201 Non-Residential Cleanup Criteria

Bold-exceeds the Drinking Water Criteria

Shaded -Exceeds the GSIP Criteria

Underlined exceeds the Statewide Default Background Levels

Italic-Exceeds Groundwater Protection Criteria

Exceeds Direct Contact

Table 1 Summary of Soil Analytical Results - Metals-
July 2012
RACER Trust - Davison Road Landfill
Burton, Michigan

Sample ID Sample Depth Sample Date	Statewide Default Background Levels	Non-Residential Drinking Water Protection Criteria and RBSLs	Non-Residential Groundwater Surface Water Interface Protection Criteria and RBSLs	Non-Residential Groundwater Contact Protection Criteria and RBSLs	Non-Residential Direct Contact Criteria and RBSLs	SB/MW-11-12 (6'-7') 07/19/2012	SB/MW-3-12 (3'-4') 07/19/2012	SB-28-12 (2'-3') 07/19/2012	SB-27-12 (2'-3') 07/20/2012	SB-27-12 (6'-7') 07/20/2012	SB-18-12 (2'-3') 07/20/2012	SB-18-12 (8'-9') 07/20/2012	SB-18-12 (8'-9') Dup 07/20/2012	SB-19-12 (3'-4') 07/20/2012	SB-20-12 (1'-2') 07/20/2012	SB/MW-5-12 (9'10') 07/20/2012	SB-15-12 (11'-12') 07/20/2012
Metals ug/Kg																	
Aluminum (B)	6.9E+6	1,000	NA	1.09e+9 (D)	3.7e+8(DD)	2,460,000	1,940,000	3,800,000	2,580,000	1,600,000	1,170,000	4,720,000	4,400,000	4,040,000	2,050,000	1,780,000	950,000
Arsenic	5,800	4,600	4,600	2,000,000	37,000	3,010	4,700	1,640	6,720	2,500	650	1,800	1,570	1,060	1,730	1,000	840
Cadmium (B)	1,200	6,000	(G,X)	2.30E+08	2.10E+06	<200	<200	<200	3,140	340	<200	<200	<200	<200	<200	210	<200
Chromium, Total	18,000 (total)	1.09e+9(D)	(G,X)	1.09e+9(D)	1.09e+9(D)	3,340	3,280	5,320	43,800	3,350	5,570	8,870	9,110	4,040	3,600	27,500	2,030
Cobalt	6,800	2,000	2,000	4.80E+07	9.00E+06	2,820	2,260	3,670	3,430	2,410	570	4,610	6,770	4,870	2,860	1,520	1,720
Copper (B)	32,000	5.8E+6	(G)	1.09e+9(D)	7.00E+07	4,040	9,240	4,910	52,500	7,700	5,500	6,810	5,320	4,280	4,800	16,400	5,910
Iron (B)	1.2E+7	6,000	NA	1.09e+9(D)	5.80E+08	11,500,000	4,130,000	7,100,000	8,870,000	4,260,000	3,320,000	8,840,000	7,280,000	5,080,000	4,650,000	18,000,000	3,320,000
Manganese (B)	4.4E+5	1,000	(G,X)	1.80E+08	9.00E+07	377,000	131,000	302,000	866,000	168,000	120,000	231,000	312,000	411,000	624,000	343,000	197,000
Mercury, Total	130	1,700	50 (M); 1.2	47,000	5.80E+05	<50	<50	<50	104	<50	<50	<50	<50	<50	<50	<50	<50
Vanadium	NA	9.90E+05	4.30E+05	1.09e+9(D)	5.5E+6 (DD)	5,930	7,480	9,460	7,910	5,900	1,100	14,400	12,900	6,680	6,780	5,430	4,940
Zinc (B)	47,000	5.00E+06	(G)	1.09e+9(D)	6.3E+8	17,900	21,800	9,910	505,000	26,600	6,810	23,200	18,600	12,600	8,450	29,000	12,800

Analytical results compared to the MDEQ Part 201 Non-Residential Cleanup Criteria

Bold-exceeds the Drinking Water Criteria

Shaded -Exceeds the GSIP Criteria

Underlined exceeds the Statewide Default Background Levels

Italic-Exceeds Groundwater Protection Criteria

~~Exceeds Direct Contact~~

Table 2, Summary of Soil I Analytical Results-VOCs 2012 -Non-Residential Exceedences
RACER Trust - Davison Road Landfill- Burton, MI

Sample ID Sample Depth Sample Date	Non-Residential Drinking Water Protection Criteria and RBSLs	Non-Res Groundwater Surface Water Interface Protection Criteria and RBSLs	Non-Res Groundwater Contact Protection Criteria and RBSLs	Non-Residential Direct Contact Criteria and RBSLs	SB/MW-2-12 (14'-15') 07/16/2012	SB-24-12 (3'-4') 07/16/2012	SB-26-12 (7'-8') 07/16/2012	Duplicate 1 07/16/2012	SB/MW-1-12 (7'-7.5') 07/17/2012	SB-25-12 (11'-12') 07/17/2012	SB/MW-14-12 (6.5'-7') 07/17/2012	SB-21-12 (0'-2') 07/17/2012	SB/MW-13-12 (0.5'-1.5') 07/17/2012	Duplicate 2 07/17/2012	SB-23-12 (1.5'-2.5') 07/17/2012	SB/MW-12-12 (8.5'-9.5') 07/17/2012	SB-22-12 (2'-3') 07/17/2012
Volatiles, VOCs ug/Kg																	
Ethylbenzene (l)	1,500	360	1.4E+5 (C)	1.4E+5 (C)	<70	<60	<80	<70	<70	1,280	<100	<200	<200	<200	<200	<200	<200
Naphthalene	1.05E+05	730	2.10E+06	5.20E+07	<490	<400	1,890	1,630	<470	<510	<880	<1,500	<1,100	<1,100	<1,300	<1,300	<1,200
Styrene	2,700	2,100 (X)	270,000	520000	<70	<60	<80	<70	<70	9,150	<100	<200	<200	<200	<200	<200	<200
Tetrachloroethylene	100	1,200 (X)	88,000 (c)	88,000 (c)	<70	<60	<80	<70	<70	<80	<100	<200	<200	<200	<200	<200	<200
Trichloroethylene	100	4,000 (X)	4.40E+05	5.0E+5 (C,DD)	<70	<60	<80	<70	<70	<80	<100	<200	<200	<200	<200	<200	<200

Analytical results compared to the MDEQ Part 201 Non-Residential Cleanup Criteria

Bold-exceeds the Drinking Water Criteria
Shaded -Exceeds the GSIP Criteria
Italic-Exceeds Groundwater Protection Criteria
~~Exceeds the Non-Residential Direct Contact Criteria~~

Note: Includes analytes with concentrations above the
Non Residential cleanup criteria only.

Table 2, Summary of Soil I Analytical Results-VOCs 2012 -Non-Residential Exceedences
RACER Trust - Davison Road Landfill- Burton, MI

Sample ID Sample Depth Sample Date	Non-Residential Drinking Water Protection Criteria and RBSLs	Non-Res Groundwater Surface Water Interface Protection Criteria and RBSLs	Non-Res Groundwater Contact Protection Criteria and RBSLs	Non-Residential Direct Contact Criteria and RBSLs	SB/MW-6-12 (14'-15') 07/17/2012	SB/MW-10 (2'-3') 07/18/2012	SB/MW-9 (6'-8') 07/18/2012	SB/MW-8 (5'-6') 07/18/2012	SB/MW-7 (4'-5') 07/19/2012	SB/MW-4-12 (2'-3') 07/19/2012	SB/MW-4-12 (2'-3') DUP 07/19/2012	SB-16-12 (5'-6') 07/19/2012	SB-17-12 (2'-2.5') 07/19/2012	SB/MW-11-12 (6'-7') 07/19/2012
Volatiles, VOCs ug/Kg														
Ethylbenzene (l)	1,500	360	1.4E+5 (C)	1.4E+5 (C)	<100	<80	<70	<70	<80	<70	<80	<80	<70	<70
Naphthalene	1.05E+05	730	2.10E+06	5.20E+07	<880	<500	<470	<430	<520	<460	<500	<530	<440	<460
Styrene	2,700	2,100 (X)	270,000	520000	<100	<80	<70	<70	<80	<70	<80	<80	<70	<70
Tetrachloroethylene	100	1,200 (X)	88,000 (c)	88,000 (c)	<100	<80	<70	<70	<80	<70	<80	<80	<70	<70
Trichloroethylene	100	4,000 (X)	4.40E+05	5.0E+5 (C,DD)	<100	<80	<70	<70	<80	<70	<80	<80	<70	<70

Analytical results compared to the MDEQ Part 201 Non-Residential Cleanup Criteria

Bold-exceeds the Drinking Water Criteria

Shaded -Exceeds the GSIP Criteria

Italic-Exceeds Groundwater Protection Criteria

~~Exceeds the Non-Residential Direct Contact Criteria~~

Note: Includes analytes with concentrations above the
Non Residential cleanup criteria only.

Table 2, Summary of Soil I Analytical Results-VOCs 2012 -Non-Residential Exceedences
RACER Trust - Davison Road Landfill- Burton, MI

Sample ID Sample Depth Sample Date	Non-Residential Drinking Water Protection Criteria and RBSLs	Non-Res Groundwater Surface Water Interface Protection Criteria and RBSLs	Non-Res Groundwater Contact Protection Criteria and RBSLs	Non-Residential Direct Contact Criteria and RBSLs	SB/MW-3-12 (3'-4') 07/19/2012	SB-28-12 (2'-3') 07/19/2012	SB-27-12 (2'-3') 07/20/2012	SB-27-12 (6'-7') 07/20/2012	SB-18-12 (2'-3') 07/20/2012	SB-18-12 (8'-9') 07/20/2012	SB-18-12 (8'-9') DUP 07/20/2012	SB-19-12 (3'-4') 07/20/2012	SB-20-12 (1'-2') 07/20/2012	SB/MW-5-12 (9'10') 07/20/2012	SB-15-12 (11'-12') 07/20/2012
Volatiles, VOCs ug/Kg															
Ethylbenzene (I)	1,500	360	1.4E+5 (C)	1.4E+5 (C)	<60	<70	70	<70	<50	<70	<70	<60	<60	<60	<70
Naphthalene	1.05E+05	730	2.10E+06	5.20E+07	<380	<430	490	<480	<360	<430	<460	<400	<380	660	<450
Styrene	2,700	2,100 (X)	270,000	520000	<60	<70	<60	<70	<50	<70	<70	<60	<60	<60	<70
Tetrachloroethylene	100	1,200 (X)	88,000 (c)	88,000 (c)	<60	<70	1,710	<70	<50	<70	<70	<60	<60	<60	<70
Trichloroethylene	100	4,000 (X)	4.40E+05	5.0E+5 (C,DD)	<60	<70	130	<70	<50	<70	<70	<60	<60	<60	<70

Analytical results compared to the MDEQ Part 201 Non-Residential Cleanup Criteria

Bold-exceeds the Drinking Water Criteria

Shaded -Exceeds the GSIP Criteria

Italic-Exceeds Groundwater Protection Criteria

~~Exceeds the Non-Residential Direct Contact Criteria~~

Note: Includes analytes with concentrations above the
Non Residential cleanup criteria only.

Table 3, Summary of Soil Analytical Results -PNAs
2012
Non-Residential Exceedences-
RACER Trust - Davison Road Landfill
Burton, Michigan

Sample ID Sample Depth Sample Date	Non Residential Drinking Water Protection Criteria and RBSLs	Non Residential Groundwater Surface Water Interface Protection Criteria and RBSLs	Non Residential Direct Contact Criteria and RBSLs	SB/MW-2-12 (14'-15') 07/16/2012	SB-24-12 (3'-4') 07/16/2012	SB-26-12 (7'-8') 07/16/2012	Duplicate 1 07/16/2012	SB/MW-1-12 (7'-7.5') 07/17/2012	SB-25-12 (11'-12') 07/17/2012	SB/MW-14-12 (6.5'-7') 07/17/2012	SB-21-12 (0'-2') 07/17/2012	SB/MW-13-12 (0.5'-1.5') 07/17/2012	Duplicate 2 07/17/2012	SB-23-12 (1.5'-2.5') 07/17/2012	SB/MW-12-12 (8.5'-9.5') 07/17/2012
Semivolatiles, PNAs ug/Kg															
Fluoranthene	7.3E+5	5,500	4.6E+7	<330	1,200	<300	<300	<330	<300	<330	<300	<330	493	<300	<330
Phenanthrene	56,000	2,100	1.6E+6	<330	<500	<300	<300	<330	<300	<330	<300	<330	<330	<300	<330

Analytical results compared to the
MDEQ Part 201 Non-Residential Cleanup Criteria
Bold-exceeds the Drinking Water Criteria
Shaded -Exceeds the GSIP Criteria
Italic-Exceeds Groundwater Protection Criteria

Note: Includes analytes with concentrations above the
Non Res cleanup criteria only.

Table 3, Summary of Soil Analytical Results -PNAs
2012
Non-Residential Exceedences-
RACER Trust - Davison Road Landfill
Burton, Michigan

Sample ID Sample Depth Sample Date	Non Residential Drinking Water Protection Criteria and RBSLs	Non Residential Groundwater Surface Water Interface Protection Criteria and RBSLs	Non Residential Direct Contact Criteria and RBSLs	SB-22-12 (2'-3') 07/17/2012	SB/MW-6-12 (14'-15') 07/17/2012	SB/MW-10-12 07/18/2012	SB/MW-9-12 (6-8') 07/18/2012	SB/MW-8-12 (5'-6') 07/18/2012	SB/MW-7-12 (4'-5') 07/19/2012	SB/MW-4-12 (2'-3') 07/19/2012	SB/MW-4-12 (2'-3') DUP 07/19/2012	SB-16-12 (5'-6') 07/19/2012	SB-17-12 (2'-2.5') 07/19/2012	SB/MW-11-12 (6'-7') 07/19/2012
Semivolatiles, PNAs ug/Kg														
Fluoranthene	7.3E+5	5,500	4.6E+7	<300	<330	<330	<330	<330	<330	<330	<330	<300	<300	<330
Phenanthrene	56,000	2,100	1.6E+6	<300	<330	<330	<330	<330	<330	<330	<330	<300	<300	<330

Analytical results compared to the
MDEQ Part 201 Non-Residential Cleanup Criteria
Bold-exceeds the Drinking Water Criteria
Shaded -Exceeds the GSIP Criteria
Italic-Exceeds Groundwater Protection Criteria

Note: Includes analytes with concentrations above the
Non Res cleanup criteria only.

Table 3, Summary of Soil Analytical Results -PNAs
2012
Non-Residential Exceedences-
RACER Trust - Davison Road Landfill
Burton, Michigan

Sample ID Sample Depth Sample Date	Non Residential Drinking Water Protection Criteria and RBSLs	Non Residential Groundwater Surface Water Interface Protection Criteria and RBSLs	Non Residential Direct Contact Criteria and RBSLs	SB/MW-3-12 (3'-4') 07/19/2012	SB-28-12 (2'-3') 07/19/2012	SB-27-12 (2'-3') 07/20/2012	SB-27-12 (6'-7') 07/20/2012	SB-18-12 (2'-3') 07/20/2012	SB-18-12 (8'-9') 07/20/2012	SB-18-12 (8'-9') DUP 07/20/2012	SB-19-12 (3'-4') 07/20/2012	SB-20-12 (1'-2') 07/20/2012	SB/MW-5-12 (9'10') 07/20/2012	SB-15-12 07/20/2012
Semivolatiles, PNAs ug/Kg														
Fluoranthene	7.3E+5	5,500	4.6E+7	<330	<330	5,730	675	<300	<300	<300	<300	<300	<330	<300
Phenanthrene	56,000	2,100	1.6E+6	<330	<330	3,389	434	<300	<300	<300	<300	<300	<330	<300

Analytical results compared to the
MDEQ Part 201 Non-Residential Cleanup Criteria
Bold-exceeds the Drinking Water Criteria
Shaded -Exceeds the GSIP Criteria
Italic-Exceeds Groundwater Protection Criteria

Note: Includes analytes with concentrations above the
Non Res cleanup criteria only.

Table 4
Groundwater Analytical Results
Metals
Davison Road Landfill
Burton, MI

Metals ug/L	Non-Residential Drinking Water Criteria and RBSLs	Non-Residential Groundwater Surface Water Interface Protection Criteria and RBSLs	Non-Residential Groundwater Contact Criteria and RBSLs	MW-1				MW-1-12				MW-2			
				8/8/12	11/6/12	4/23/13	7/24/13	8/8/12	11/6/12	4/23/13	7/25/13	8/10/12	11/8/12	4/22/13	7/24/13
Aluminum (B)	4,100	NA	6.4E+7	12	17	14	7	194	14	11	349	8	35	9	12
Arsenic	10 (A)	10	4,300	6	6	4	5	<2	<2	<2	51	102	104	15	26
Cadmium (B)	5.0 (A)	(G,X)	1.9E+5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium, Total	100 (A)	11	4.6E+5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cobalt	100	100	2.4E+6	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Copper (B)	1,000 (E)	(G)	7.4E+6	<4	<4	<5	<4	<4	<4	<5	5	<4	<4	<5	<4
Iron (B)	5,600(E)	NA	5.8E+7	1,270	1,040	1,590	1,360	490	50	270	380	25,800	25,100	16,600	20,500
Manganese (B)	2,500 (E)	(G,X)	9.1E+6	1,590	582	1,860	1,480	226	27	<5	18	3,120	3,270	577	1,190
Mercury, Total	2.0 (A)	0.0013	56 (S)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Vanadium	62	12	9.7E+5	<4	<4	<2	<4	<4	<4	<4	<4	6	6	<2	<4
Zinc (B)	5,000 (E)	(G)	1.1E+8	<5	6	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5

Notes:

NS I GW-Not samples, insufficient groundwater in MW

VOC-All concentrations below laboratory detection limit

SVOC/PNAs-All concentrations below laboratory detection limit

Results in parts per billion (ppb)/micrograms per liter (ug/l)

Concentrations compared to the MDEQ Part 201 Non-Residential Cleanup Criteria

Bold-exceeds the MDEQ Part 201 Non Residential Drinking Water Criteria

Shaded-Exceeds Non-Residential GSI Criteria

Table 4
Groundwater Analytical Results
Metals
Davison Road Landfill
Burton, MI

Metals ug/L	Non-Residential Drinking Water Criteria and RBSLs	Non-Residential Groundwater Surface Water Interface Protection Criteria and RBSLs	Non-Residential Groundwater Contact Criteria and RBSLs	MW-2-12				MW-3-12				MW-4-12			
				8/8/12	11/6/12	4/23/13	7/25/13	8/9/12	11/6/12	4/17/13	7/24/13	8/9/12	11/6/12	4/17/13	7/24/13
Aluminum (B)	4,100	NA	6.4E+7	21	19	199	8	37	26	56	15	44	18	19	23
Arsenic	10 (A)	10	4,300	2	<2	<2	<2	25	19	2	13	5	12	<2	3
Cadmium (B)	5.0 (A)	(G,X)	1.9E+5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium, Total	100 (A)	11	4.6E+5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cobalt	100	100	2.4E+6	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Copper (B)	1,000 (E)	(G)	7.4E+6	<4	<4	<5	<4	<4	<4	<5	<4	<4	<4	6	<4
Iron (B)	5,600(E)	NA	5.8E+7	180	20	2,100	470	6,170	5,000	410	3,480	330	5,310	640	410
Manganese (B)	2,500 (E)	(G,X)	9.1E+6	347	8	30	69	823	523	73	855	417	351	164	1680
Mercury, Total	2.0 (A)	0.0013	56 (S)	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Vanadium	62	12	9.7E+5	<4	<4	<2	<4	<4	<4	<2	<4	<4	<4	<2	<4
Zinc (B)	5,000 (E)	(G)	1.1E+8	<5	<5	10	<5	10	<5	<5	<5	<5	6	<5	<5

Notes:

NS I GW-Not samples, insufficient groundwater in MW

VOC-All concentrations below laboratory detection limit

SVOC/PNAs-All concentrations below laboratory detection limit

Results in parts per billion (ppb)/micrograms per liter (ug/l)

Concentrations compared to the MDEQ Part 201 Non-Residential Cleanup Criteria

Bold-exceeds the MDEQ Part 201 Non Residential Drinking Water Criteria

Shaded-Exceeds Non-Residential GSI Criteria

Table 4
Groundwater Analytical Results
Metals
Davison Road Landfill
Burton, MI

Metals ug/L	Non-Residential Drinking Water Criteria and RBSLs	Non-Residential Groundwater Surface Water Interface Protection Criteria and RBSLs	Non-Residential Groundwater Contact Criteria and RBSLs	MW-4-04				MW-5-12				MW-6-12			
				8/9/12	11/6/12	4/23/13	7/25/13	8/10/12	11/8/12	4/23/13	7/24/13	8/10/12	11/6/12	4/23/13	7/25/13
Aluminum (B)	4,100	NA	6.4E+7	509	NS I GW	30	6	8	13	38	11	32	73	32	11
Arsenic	10 (A)	10	4,300	8	NS I GW	<2	<2	3	<2	<2	<2	19	29	2	10
Cadmium (B)	5.0 (A)	(G,X)	1.9E+5	1.1	NS I GW	<.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium, Total	100 (A)	11	4.6E+5	<5	NS I GW	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cobalt	100	100	2.4E+6	23	NS I GW	<5	<5	<5	<5	<5	<5	<5	<5	<5	7
Copper (B)	1,000 (E)	(G)	7.4E+6	22	NS I GW	100	<4	<4	<4	<5	17	<4	<4	<5	<4
Iron (B)	5,600(E)	NA	5.8E+7	9,360	NS I GW	2,310	320	16,600	5,320	770	5,550	10,200	11,200	3,570	7,420
Manganese (B)	2,500 (E)	(G,X)	9.1E+6	4,740	NS I GW	140	252	1,540	1,830	596	1100	1,020	878	2,270	3,880
Mercury, Total	2.0 (A)	0.0013	56 (S)	<0.2	NS I GW	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2 *	<0.2	<0.2
Vanadium	62	12	9.7E+5	5	NS I GW	<2	<4	<4	<4	<2	<4	<4	<4	<2	<4
Zinc (B)	5,000 (E)	(G)	1.1E+8	65	NS I GW	9	<5	<5	<5	<5	<5	<5	<5	<5	<5

Notes:

NS I GW-Not samples, insufficient groundwater in MW

VOC-All concentrations below laboratory detection limit

SVOC/PNAs-All concentrations below laboratory detection limit

Results in parts per billion (ppb)/micrograms per liter (ug/l)

Concentrations compared to the MDEQ Part 201 Non-Residential Cleanup Criteria

Bold-exceeds the MDEQ Part 201 Non Residential Drinking Water Criteria

Shaded-Exceeds Non-Residential GSI Criteria

Table 4
Groundwater Analytical Results
Metals
Davison Road Landfill
Burton, MI

Metals ug/L	Non-Residential Drinking Water Criteria and RBSLs	Non-Residential Groundwater Surface Water Interface Protection Criteria and RBSLs	Non-Residential Groundwater Contact Criteria and RBSLs	MW-7-12				MW-8-12				MW-9-12			
				8/9/12	11/6/12	4/17/13	7/24/13	8/9/13	11/6/13	4/17/13	7/25/13	8/9/12	11/8/12	4/16/13	7/23/13
Aluminum (B)	4,100	NA	6.4E+7	25	17	45	11	13	NS I GW	14	144	31	<5	14	30
Arsenic	10 (A)	10	4,300	3	2	<2	<2	39	NS I GW	<2	<2	3	22	<2	6
Cadmium (B)	5.0 (A)	(G,X)	1.9E+5	<0.5	<0.5	<0.5	<0.5	<0.5	NS I GW	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium, Total	100 (A)	11	4.6E+5	<5	<5	<5	<5	<5	NS I GW	<5	<5	<5	<5	<5	<5
Cobalt	100	100	2.4E+6	<5	<5	<5	<5	<5	NS I GW	<5	<5	<5	<5	<5	<5
Copper (B)	1,000 (E)	(G)	7.4E+6	<4	<4	10	<4	<4	NS I GW	<5	<4	<4	<4	<5	<4
Iron (B)	5,600(E)	NA	5.8E+7	120	180	910	100	23,700	NS I GW	440	700	90	3,640	100	2,040
Manganese (B)	2,500 (E)	(G,X)	9.1E+6	29	128	<5	266	4,600	NS I GW	47	269	162	219	256	376
Mercury, Total	2.0 (A)	0.0013	56 (S)	<0.2	<0.2	<0.2	<0.2	<0.2	NS I GW	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Vanadium	62	12	9.7E+5	<4	<4	<2	<4	<4	NS I GW	<2	<4	<4	<4	<2	<4
Zinc (B)	5,000 (E)	(G)	1.1E+8	<5	<5	<5	<5	<5	NS I GW	<5	9	<5	<5	<5	<5

Notes:

NS I GW-Not samples, insufficient groundwater in MW

VOC-All concentrations below laboratory detection limit

SVOC/PNAs-All concentrations below laboratory detection limit

Results in parts per billion (ppb)/micrograms per liter (ug/l)

Concentrations compared to the MDEQ Part 201 Non-Residential Cleanup Criteria

Bold-exceeds the MDEQ Part 201 Non Residential Drinking Water Criteria

Shaded-Exceeds Non-Residential GSI Criteria

Table 4
Groundwater Analytical Results
Metals
Davison Road Landfill
Burton, MI

Metals ug/L	Non-Residential Drinking Water Criteria and RBSLs	Non-Residential Groundwater Surface Water Interface Protection Criteria and RBSLs	Non-Residential Groundwater Contact Criteria and RBSLs	MW-10-12				MW-11-12				MW-12-12			
				8/10/12	11/8/12	4/16/13	7/25/13	8/19/12	11/6/12	4/18/13	7/23/13	8/9/12	11/8/12	4/22/13	7/23/13
Aluminum (B)	4,100	NA	6.4E+7	19	NS I GW	12	11	NS I GW	NS I GW	13	11	13	13	44	12
Arsenic	10 (A)	10	4,300	166	NS I GW	19	51	NS I GW	NS I GW	<2	<2	39	31	29	26
Cadmium (B)	5.0 (A)	(G,X)	1.9E+5	<0.5	NS I GW	<0.5	<0.5	NS I GW	NS I GW	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium, Total	100 (A)	11	4.6E+5	<5	NS I GW	<5	<5	NS I GW	NS I GW	<5	<5	<5	<5	<5	<5
Cobalt	100	100	2.4E+6	<5	NS I GW	<5	<5	NS I GW	NS I GW	<5	<5	<5	<5	<5	<5
Copper (B)	1,000 (E)	(G)	7.4E+6	<4	NS I GW	<5	<4	NS I GW	NS I GW	<5	<4	<4	<4	<5	<4
Iron (B)	5,600(E)	NA	5.8E+7	21,700	NS I GW	11,600	11,200	NS I GW	NS I GW	700	160	23,700	25,100	34,200	27,700
Manganese (B)	2,500 (E)	(G,X)	9.1E+6	1,570	NS I GW	2,170	1,640	NS I GW	NS I GW	247	1,040	4,600	4,610	5,180	4,940
Mercury, Total	2.0 (A)	0.0013	56 (S)	<0.2	NS I GW	<0.2	<0.2	NS I GW	NS I GW	<0.2	<0.2	<0.2	<0.2 *	<0.2	<0.2
Vanadium	62	12	9.7E+5	<4	NS I GW	<2	<4	NS I GW	NS I GW	<2	<4	<4	<4	<4	<4
Zinc (B)	5,000 (E)	(G)	1.1E+8	14	NS I GW	<5	<5	NS I GW	NS I GW	<5	<5	<5	<5	<5	<5

Notes:

NS I GW-Not samples, insufficient groundwater in MW

VOC-All concentrations below laboratory detection limit

SVOC/PNAs-All concentrations below laboratory detection limit

Results in parts per billion (ppb)/micrograms per liter (ug/l)

Concentrations compared to the MDEQ Part 201 Non-Residential Cleanup Criteria

Bold-exceeds the MDEQ Part 201 Non Residential Drinking Water Criteria

Shaded-Exceeds Non-Residential GSI Criteria

Table 4
Groundwater Analytical Results
Metals
Davison Road Landfill
Burton, MI

Metals ug/L	Non-Residential Drinking Water Criteria and RBSLs	Non-Residential Groundwater Surface Water Interface Protection Criteria and RBSLs	Non-Residential Groundwater Contact Criteria and RBSLs	MW-13-12				MW-14-12				GC-1 (Upstream)			
				8/9/12	11/6/12	4/22/13	7/23/13	8/9/12	11/6/12	4/22/13	7/23/13	8/12/13	11/6/12	4/22/13	7/22/13
Aluminum (B)	4,100	NA	6.4E+7	12	7	13	27	38	16	8	22	NS I GW	92	251	65
Arsenic	10 (A)	10	4,300	<2	3	<2	<2	<2	<2	<2	<2	NS I GW	3	2	6
Cadmium (B)	5.0 (A)	(G,X)	1.9E+5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NS I GW	<0.5	<0.5	<0.5
Chromium, Total	100 (A)	11	4.6E+5	<5	<5	<5	<5	<5	<5	<5	<5	NS I GW	<5	<5	<5
Cobalt	100	100	2.4E+6	<5	<5	<5	<5	<5	<5	<5	<5	NS I GW	<5	<5	<5
Copper (B)	1,000 (E)	(G)	7.4E+6	<4	<4	<5	<4	<4	<4	<4	<4	NS I GW	<4	<5	<4
Iron (B)	5,600(E)	NA	5.8E+7	70	1,360	440	360	60	40	330	20	NS I GW	780	780	400
Manganese (B)	2,500 (E)	(G,X)	9.1E+6	304	626	<5	291	184	92	110	22	NS I GW	95	52	57
Mercury, Total	2.0 (A)	0.0013	56 (S)	<0.2	<0.2 *	<0.2	<0.2	<0.2	<0.2 *	<0.2	<0.2	NS I GW	<0.2	<0.2	<0.2
Vanadium	62	12	9.7E+5	<4	<4	<2	<4	<4	<4	<2.0	<4	NS I GW	<4	<2	<4
Zinc (B)	5,000 (E)	(G)	1.1E+8	<5	<5	<5	<5	<5	11	<5.0	<5	NS I GW	7	8	<5

Notes:

NS I GW-Not samples, insufficient groundwater in MW

VOC-All concentrations below laboratory detection limit

SVOC/PNAs-All concentrations below laboratory detection limit

Results in parts per billion (ppb)/micrograms per liter (ug/l)

Concentrations compared to the MDEQ Part 201 Non-Residential Cleanup Criteria

Bold-exceeds the MDEQ Part 201 Non Residential Drinking Water Criteria

Shaded-Exceeds Non-Residential GSI Criteria

Table 4
Groundwater Analytical Results
Metals
Davison Road Landfill
Burton, MI

Metals ug/L	Non-Residential Drinking Water Criteria and RBSLs	Non-Residential Groundwater Surface Water Interface Protection Criteria and RBSLs	Non-Residential Groundwater Contact Criteria and RBSLs	GC-2 (Mid)				GC-3 (Downstream)				TMW-1				TMW-6			
				8/12/12	11/6/12	4/17/13	7/22/13	8/12/12	11/6/12	4/17/13	7/22/13	8/9/12	11/8/12	4/17/13	7/24/13	8/10/12	11/8/12	4/18/13	7/23/13
Aluminum (B)	4,100	NA	6.4E+7	NS I GW	437	178	14	NS I GW	67	312	19	29	20	14	15	211	59	59	33
Arsenic	10 (A)	10	4,300	NS I GW	3	<2	6	NS I GW	2	3	7	3	<2	<2	4	9	<2	<2	2
Cadmium (B)	5.0 (A)	(G,X)	1.9E+5	NS I GW	<0.5	<0.5	<0.5	NS I GW	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	0.6	<0.5	<0.5
Chromium, Total	100 (A)	11	4.6E+5	NS I GW	<5	<5	<5	NS I GW	<5	<5	<5	<5	<5	<5	<5	7	<5	<5	<5
Cobalt	100	100	2.4E+6	NS I GW	<5	<5	<5	NS I GW	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Copper (B)	1,000 (E)	(G)	7.4E+6	NS I GW	<4	<5	<4	NS I GW	<4	<5	<4	<4	6	5	<4	4	<4	<5	<4
Iron (B)	5,600(E)	NA	5.8E+7	NS I GW	1,520	800	290	NS I GW	650	1,230	280	840	630	960	2,200	4,920	100	1,170	1,880
Manganese (B)	2,500 (E)	(G,X)	9.1E+6	NS I GW	125	50	38	NS I GW	72	76	32	325	277	5	260	308	316	462	1,090
Mercury, Total	2.0 (A)	0.0013	56 (S)	NS I GW	<0.2	<0.2	<0.2	NS I GW	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Vanadium	62	12	9.7E+5	NS I GW	<4	<2	<4	NS I GW	<4	<2	<4	<4	<4	<2	<4	<4	<4	<2	<4
Zinc (B)	5,000 (E)	(G)	1.1E+8	NS I GW	16	8	<5	NS I GW	6	21	<5	<5	<5	<5	<5	11	21	360	<5

Notes:

NS I GW-Not samples, insufficient groundwater in MW

VOC-All concentrations below laboratory detection limit

SVOC/PNAs-All concentrations below laboratory detection limit

Results in parts per billion (ppb)/micrograms per liter (ug/l)

Concentrations compared to the MDEQ Part 201 Non-Residential Cleanup Criteria

Bold-exceeds the MDEQ Part 201 Non Residential Drinking Water Criteria

Shaded-Exceeds Non-Residential GSI Criteria

Table 4
Groundwater Analytical Results
Metals
Davison Road Landfill
Burton, MI

Metals ug/L	Non-Residential Drinking Water Criteria and RBSLs	Non-Residential Groundwater Surface Water Interface Protection Criteria and RBSLs	Non-Residential Groundwater Contact Criteria and RBSLs	D-3 East				D-2 Mid				D-1 West			
				8/10/12	11/8/12	4/22/13	7/22/13	8/10/12	11/8/12	4/22/13	7/22/13	8/10/12	11/8/12	4/22/13	7/22/13
Aluminum (B)	4,100	NA	6.4E+7	NS I GW	NS I GW	82	24	NS I GW	NS I GW	64	NS-I GW	NS I GW	NS I GW	68	NS-I GW
Arsenic	10 (A)	10	4,300	NS I GW	NS I GW	<2	18	NS I GW	NS I GW	<2	NS-I GW	NS I GW	NS I GW	<2	NS-I GW
Cadmium (B)	5.0 (A)	(G,X)	1.9E+5	NS I GW	NS I GW	<0.5	<0.5	NS I GW	NS I GW	<0.5	NS-I GW	NS I GW	NS I GW	<0.5	NS-I GW
Chromium, Total	100 (A)	11	4.6E+5	NS I GW	NS I GW	<5	<5	NS I GW	NS I GW	<5	NS-I GW	NS I GW	NS I GW	<5	NS-I GW
Cobalt	100	100	2.4E+6	NS I GW	NS I GW	<5	<5	NS I GW	NS I GW	<5	NS-I GW	NS I GW	NS I GW	<5	NS-I GW
Copper (B)	1,000 (E)	(G)	7.4E+6	NS I GW	NS I GW	<5	<4	NS I GW	NS I GW	<5	NS-I GW	NS I GW	NS I GW	<5	NS-I GW
Iron (B)	5,600(E)	NA	5.8E+7	NS I GW	NS I GW	350	19,000	NS I GW	NS I GW	350	NS-I GW	NS I GW	NS I GW	410	NS-I GW
Manganese (B)	2,500 (E)	(G,X)	9.1E+6	NS I GW	NS I GW	30	10,400	NS I GW	NS I GW	55	NS-I GW	NS I GW	NS I GW	48	NS-I GW
Mercury, Total	2.0 (A)	0.0013	56 (S)	NS I GW	NS I GW	<0.2	<0.2	NS I GW	NS I GW	<0.2	NS-I GW	NS I GW	NS I GW	<0.2	NS-I GW
Vanadium	62	12	9.7E+5	NS I GW	NS I GW	<2	<4	NS I GW	NS I GW	<2	NS-I GW	NS I GW	NS I GW	<2	NS-I GW
Zinc (B)	5,000 (E)	(G)	1.1E+8	NS I GW	NS I GW	8	<5	NS I GW	NS I GW	<5	NS-I GW	NS I GW	NS I GW	<5	NS-I GW

Notes:

NS I GW-Not samples, insufficient groundwater in MW

VOC-All concentrations below laboratory detection limit

SVOC/PNAs-All concentrations below laboratory detection limit

Results in parts per billion (ppb)/micrograms per liter (ug/l)

Concentrations compared to the MDEQ Part 201 Non-Residential Cleanup Criteria

Bold-exceeds the MDEQ Part 201 Non Residential Drinking Water Criteria

Shaded-Exceeds Non-Residential GSI Criteria

APPENDIX A

SOIL BORING LOGS & MONITORING WELL CONSTRUCTION DIAGRAMS



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB/MW-1-12

BORING LOCATION: NW corner of site

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/17/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Graves

CITY: Burton **COUNTY:** Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.0) Brown, Dry, SILT; with sand			1SS 0-1'			<1	
					2SS 1-2'			<1	
		(2.0 - 5.0) Brown, Dry, SILT; with clay, gravel			3SS 2-3'			<1	
					4SS 3-4'			<1	
					5SS 4-5'			<1	
-5.0	5	(5.0 - 7.0) Brown/Gray, Moist, SILT, CLAY and SAND; trace gravel			6SS 5-6'			<1	
					7SS 6-7'			<1	
		(7.0 - 11.0) Brown, Moist, SILT and FINE SAND			8SS 7-8'			<1	Collected sample at 7-7.5'
					9SS 8-9'			<1	
-10.0	10				10SS 9-10'			<1	
					11SS 10-11'			<1	
		(11.0 - 12.0) Gray, Wet, SILT			12SS 11-12'			<1	
-15.0	15								

GROUNDWATER OBSERVATIONS

☒ DURING DRILLING: 7.5'

☒ AT COMPLETION OF DRILLING: NR

☒ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB/MW-2-12

BORING LOCATION: East of MW-1

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/16/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Lambert

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 4.0) Brown, Dry, Silty SAND			1SS 0-1'			<1	
					2SS 1-2'			<1	
					3SS 2-3'			<1	
					4SS 3-4'			<1	
		(4.0 - 7.0) Brown, Very Moist, Silty SAND			5SS 4-5'			1	
-5.0	5				6SS 5-6'			<1	
					7SS 6-7'			<1	
		(7.0 - 11.0) Gray, Moist, CLAY			8SS 7-8'			<1	
					9SS 8-9'			<1	
-10.0	10				10SS 9-10'			<1	
					11SS 10-11'			<1	
		(11.0 - 16.0) Gray, Moist, SILT; trace clay			12SS 11-12'			<1	
					13SS 12-13'			<1	
					14SS 13-14'			<1	
-15.0	15				15SS 14-15'			<1	Collected sample at 14-15'
					16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS

∞ DURING DRILLING: NE

▼ AT COMPLETION OF DRILLING: NR

▼ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB/MW-3-12

BORING LOCATION: West side of creek

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/19/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Lambert

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 1.0) Dark Brown, Dry, TOPSOIL, SAND and SILT; trace organics and gravel			1SS 0-1'			<1	
		(1.0 - 4.0) Brown, Dry, Sandy SILT; some organics, few gravel			2SS 1-2'			<1	
					3SS 2-3'			<1	
					4SS 3-4'			<1	Collected sample at 3-4'
		(4.0 - 8.0) Gray, Wet, Silty SAND			5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	
					7SS 6-7'			<1	
					8SS 7-8'			<1	
		(8.0 - 12.0) Gray, Wet, SILT; some clay			9SS 8-9'			<1	
-10.0	10				10SS 9-10'			<1	
					11SS 10-11'			<1	
					12SS 11-12'			<1	
		(12.0 - 16.0) Gray, Wet, Clayey SILT			13SS 12-13'			<1	
					14SS 13-14'			<1	
					15SS 14-15'			<1	
-15.0	15				16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 5'

▼ AT COMPLETION OF DRILLING: NR

▼ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill
CLIENT: Racer Trust
BORING NO: SB/MW-4-12
BORING LOCATION: NW of MW-7, north of creek
METHOD OF DRILLING: Auger
GROUND ELEVATION: NR
NOTES:

DATE DRILLED: 07/19/12
JOB NUMBER: 10496.00004
DRILLER/HELPER: Ludwick/MacMurray
DRILL RIG: AMS
LOGGED BY: Lambert
CITY: Burton **COUNTY:** Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.0) Black, Moist, TOPSOIL, Fine to Medium SAND and SILT; some organics			1SS 0-1'			<1	
					2SS 1-2'			<1	
		(2.0 - 4.0) Brown, Moist, Fine to Medium SAND and SILT			3SS 2-3'			<1	Collected sample at 2-3'
					4SS 3-4'			<1	
-5.0	5	(4.0 - 6.0) Brown, Moist, Fine to Coarse SAND; some gravel, few cobbles			5SS 4-5'			<1	Collected sample at 4-5'
					6SS 5-6'			<1	
		(6.0 - 8.0) Gray, Wet, Silty CLAY			7SS 6-7'			<1	
					8SS 7-8'			<1	
		(8.0 - 12.5) Gray, Wet, CLAY			9SS 8-9'			<1	
-10.0	10				10SS 9-10'			<1	
					11SS 10-11'			<1	
					12SS 11-12'			<1	
					13SS 12-13'			<1	
		(12.5 - 16.0) Gray, Wet, Silty CLAY			14SS 13-14'			<1	
-15.0	15				15SS 14-15'			<1	
					16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 6'
▼ AT COMPLETION OF DRILLING: NR
≡ AFTER NR HOURS: NR
NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR
AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index
*St = Hand Torvane Shear Strength
*Qp = Pocket Penetrometer
*Qu = Unconfined Compression Machine



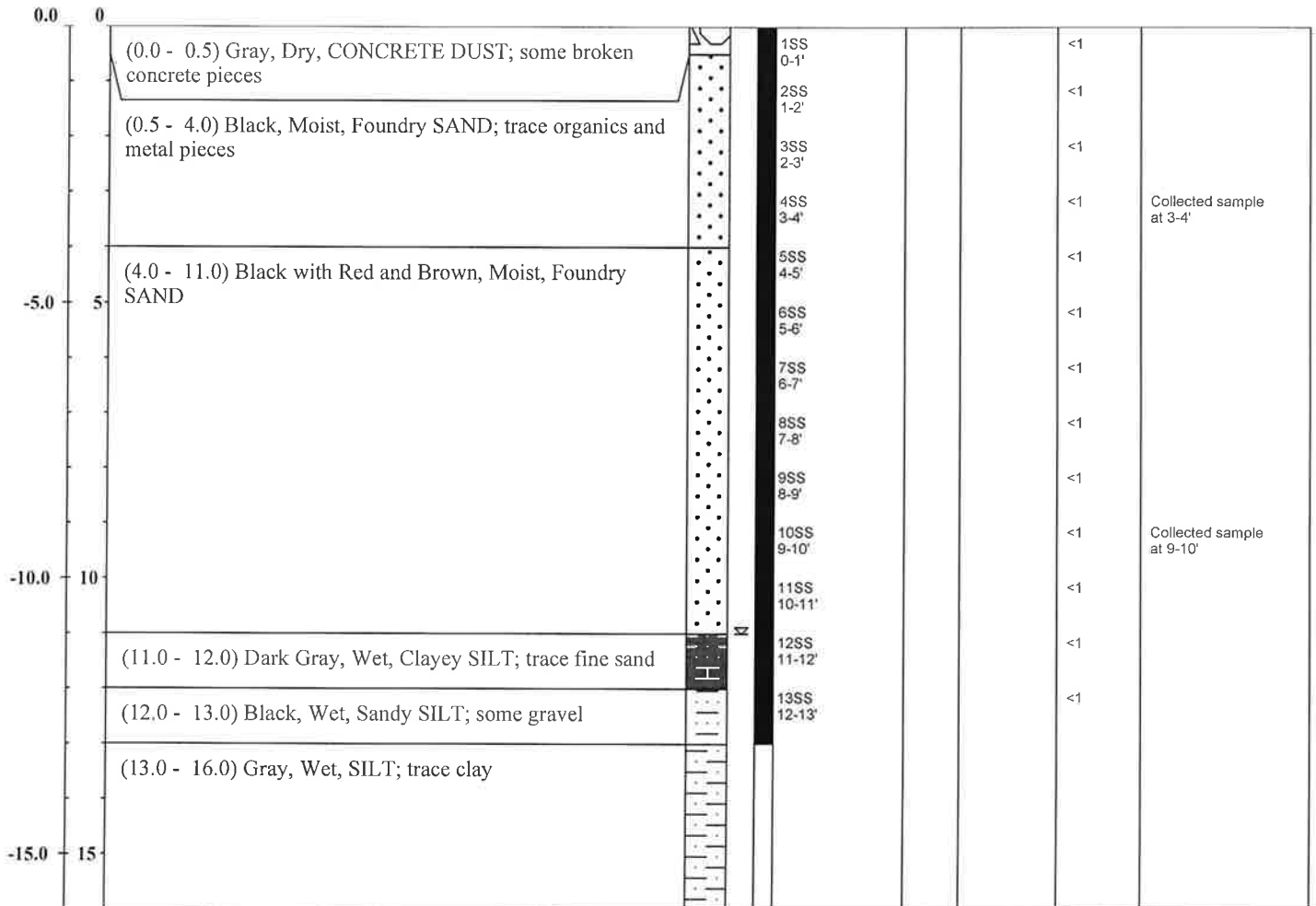
SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill
CLIENT: Racer Trust
BORING NO: SB/MW-5-12
BORING LOCATION: 273' west of FA-8, along path
METHOD OF DRILLING: Auger
GROUND ELEVATION: NR
NOTES:

DATE DRILLED: 07/20/12
JOB NUMBER: 10496.00004
DRILLER/HELPER: Ludwick/MacMurray
DRILL RIG: AMS
LOGGED BY: Lambert
CITY: Burton **COUNTY:** Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters



GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 11'
▼ AT COMPLETION OF DRILLING: NR
≡ AFTER NR HOURS: NR
NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR
AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index
*St = Hand Torvane Shear Strength
*Qp = Pocket Penetrometer
*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB/MW-6-12

BORING LOCATION:

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/17/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Graves

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 4.0) Hard, Brown, Dry SILT; with clay and coarse sand			1SS 0-1'			<1	
					2SS 1-2'			<1	
					3SS 2-3'			<1	
					4SS 3-4'			<1	
		(4.0 - 9.0) Brown, SILT; trace coarse sand			5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	
					7SS 6-7'			<1	
					8SS 7-8'			<1	
					9SS 8-9'			<1	
		(9.0 - 15.0) Gray, Moist, CLAY			10SS 9-10'			<1	
-10.0	10				11SS 10-11'			<1	
					12SS 11-12'			<1	
					13SS 12-13'			<1	
					14SS 13-14'			<1	
		(15.0 - 15.5) Gray, Wet, Fine to Medium SAND			15SS 14-15'			<1	Collected sample at 14-15'
-15.0	15	Obstruction at 15.5'			16SS 15-15.5'			<1	

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 15'

▼ AT COMPLETION OF DRILLING: NR

≡ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill
CLIENT: Racer Trust
BORING NO: SB/MW-7-12
BORING LOCATION: Midstream along Gilkey Creek
METHOD OF DRILLING: Auger
GROUND ELEVATION: NR
NOTES:

DATE DRILLED: 07/19/12
JOB NUMBER: 10496.00004
DRILLER/HELPER: Ludwick/MacMurray
DRILL RIG: AMS
LOGGED BY: Lambert
CITY: Burton **COUNTY:** Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 0.5) Black, Moist, TOPSOIL; some organics			1SS 0-1'			<1	
		(0.5 - 3.8) Brown, Moist, Fine SAND; some silt			2SS 1-2'			<1	
					3SS 2-3'			<1	Collected sample at 2-3'
		(3.8 - 4.0) Brown, Moist, Fine to Medium SAND; some silt			4SS 3-4'			<1	
		(4.0 - 5.0) Brown, Moist, SILT; trace gravel			5SS 4-5'			<1	Collected sample at 4-5'
-5.0	5	(5.0 - 6.0) Brown, Very Moist, Fine to Medium SAND			6SS 5-6'			<1	
		(6.0 - 8.0) Gray, Moist, CLAY			7SS 6-7'			<1	
					8SS 7-8'			<1	
		(8.0 - 10.5) Brown, Wet, Fine to Medium SAND			9SS 8-9'			<1	
					10SS 9-10'			<1	
-10.0	10	(10.5 - 12.0) Gray, Moist, CLAY			11SS 10-11'			<1	
					12SS 11-12'			<1	
		(12.0 - 16.0) Gray, Saturated/Wet, SILT			13SS 12-13'			<1	
					14SS 13-14'			<1	
					15SS 14-15'			<1	
-15.0	15				16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS

☒ DURING DRILLING: NE
☒ AT COMPLETION OF DRILLING: NR
☒ AFTER NR HOURS: NR
NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR
AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index
*St = Hand Torvane Shear Strength
*Qp = Pocket Penetrometer
*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB/MW-8-12

BORING LOCATION:

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/18/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Lambert

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 4.0) Mottled Brown/Orange, Moist, Sandy SILT; trace gravel			1SS 0-1'			<1	
					2SS 1-2'			<1	
					3SS 2-3'			<1	
					4SS 3-4'			<1	
		(4.0 - 7.0) Brown, Dry, Sandy SILT; trace gravel			5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	Collected sample at 5-6'
					7SS 6-7'			<1	
		(7.0 - 8.0) Gray and Pink Mottled, SILT; some clay			8SS 7-8'			<1	
					9SS 8-9'			<1	
		(8.0 - 16.0) Gray, Wet, SILT; some clay			10SS 9-10'			<1	
-10.0	10				11SS 10-11'			<1	
					12SS 11-12'			<1	
					13SS 12-13'			<1	
					14SS 13-14'			<1	
					15SS 14-15'			<1	
-15.0	15				16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 8.5'

▼ AT COMPLETION OF DRILLING: NR

≡ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill
CLIENT: Racer Trust
BORING NO: SB/MW-9-12
BORING LOCATION: near creek, west of MW-10
METHOD OF DRILLING: Auger
GROUND ELEVATION: NR
NOTES:

DATE DRILLED: 07/18/12
JOB NUMBER: 10496.00004
DRILLER/HELPER: Ludwick/MacMurray
DRILL RIG: AMS
LOGGED BY: Lambert
CITY: Burton **COUNTY:** Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.5) Mottled Brown/Orange, Dry, Sandy SILT; trace organics			1SS 0-1'			<1	
					2SS 1-2'			<1	
					3SS 2-3'			<1	
		(2.5 - 3.5) Moist, Fine SAND; some silt			4SS 3-4'			<1	
		(3.5 - 4.0) Brown, Moist, SILT; some clay			5SS 4-5'			<1	
-5.0	5	(4.0 - 6.0) Brown, Moist, SILT; trace clay			6SS 5-6'			<1	
		(6.0 - 8.0) Gray, Moist, SILT and CLAY			7SS 6-7'			<1	Collected sample at 6-8'
					8SS 7-8'			<1	
		(8.0 - 12.0) Gray, Wet, SILT; some clay			9SS 8-9'			<1	
-10.0	10				10SS 9-10'			<1	
					11SS 10-11'			<1	
					12SS 11-12'			<1	
		(12.0 - 15.0) Gray, Wet, SILT			13SS 12-13'			<1	
					14SS 13-14'			<1	
					15SS 14-15'			<1	
-15.0	15	(15.0 - 16.0) Gray, Wet, Fine to Medium SAND			16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS

☒ DURING DRILLING: 10'
☒ AT COMPLETION OF DRILLING: NR
☒ AFTER NR HOURS: NR
NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR
AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index
*St = Hand Torvane Shear Strength
*Qp = Pocket Penetrometer
*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB/MW-10-12

BORING LOCATION: east of MW-9

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/18/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Lambert

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 1.0) Brown, Dry, SAND and SILT; some organics			1SS 0-1'			<1	
		(1.0 - 4.0) Mottled Brown/Orange, Moist to Wet, Sandy SILT			2SS 1-2'			<1	
					3SS 2-3'			<1	Collected sample at 2-3'
					4SS 3-4'			<1	
		(4.0 - 6.0) Brown, Moist to Wet, Sandy SILT			5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	
		(6.0 - 7.0) Gray, Wet, Sandy SILT			7SS 6-7'			<1	
		(7.0 - 8.0) Gray, Wet, SILT; some clay			8SS 7-8'			<1	
		(8.0 - 12.0) Gray, Saturated, SILT			9SS 8-9'			<1	
-10.0	10				10SS 9-10'			<1	
					11SS 10-11'			<1	
					12SS 11-12'			<1	
-15.0	15								

GROUNDWATER OBSERVATIONS

☐ DURING DRILLING: 5'

▼ AT COMPLETION OF DRILLING: NR

▼ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB/MW-11-12

BORING LOCATION: SW corner of site

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/19/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Lambert

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.0) Brown, Dry, SILT, SAND and FOUNDRY FILL; trace organics			1SS 0-1'			<1	
					2SS 1-2'			<1	
		(2.0 - 3.0) Mottled Brown and Red, Dry, SILT and Fine SAND; trace organics			3SS 2-3'			<1	Collected sample at 2-3'
		(3.0 - 4.0) Mottled Brown and Gray, Dry, SILT			4SS 3-4'			<1	
		(4.0 - 7.5) Mottled Brown and Orange, Moist, SILT and Fine SAND			5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	
		(7.5 - 8.0) Gray, Moist, Sandy SILT; trace organics			7SS 6-7'			<1	Collected sample at 6-7'
		(8.0 - 9.0) Brown, Wet, Silty SAND			8SS 7-8'			<1	
		(9.0 - 12.0) Gray, Wet, CLAY; trace silt with a coarse sand lense at 10.75'			9SS 8-9'			<1	
-10.0	10				10SS 9-10'			<1	
					11SS 10-11'			<1	
					12SS 11-12'			<1	
		(12.0 - 16.0) Gray, Wet, SILT; some clay			13SS 12-13'			<1	
					14SS 13-14'			<1	
					15SS 14-15'			<1	
-15.0	15				16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 8.5'

▼ AT COMPLETION OF DRILLING: NR

≡ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB/MW-12-12

BORING LOCATION:

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/17/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Graves

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 7.5) Brown, Dry, SILT and SAND; with concrete and gravel			1SS 0-1'			<1	
					2SS 1-2'			<1	
					3SS 2-3'			<1	
					4SS 3-4'			<1	
					5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	
					7SS 6-7'			<1	
					8SS 7-8'			<1	
		(7.0 - 8.5) Brown, SILT and CLAY; with coarse sand			9SS 8-9'			<1	
		(8.5 - 10.5) Black, Moist, CLAY; with silt and debris (rubber & organics)			10SS 9-10'			<1	Collected sample at 8.5-9.5'
-10.0	10				11SS 10-11'			<1	
		(10.5 - 14.0) Gray, Moist, SILT and Fine SAND			12SS 11-12'			<1	
					13SS 12-13'			<1	
					14SS 13-14'			<1	
		(14.0 - 15.0) Gray, Moist, Medium to Coarse SAND			15SS 14-15'			<1	
-15.0	15				16SS 15-16'			<1	
		(15.0 - 16.0) Gray, Moist, CLAY							

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 14'

▼ AT COMPLETION OF DRILLING: NR

≡ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill
CLIENT: Racer Trust
BORING NO: SB/MW-13-12
BORING LOCATION: along south property line
METHOD OF DRILLING: Auger
GROUND ELEVATION: NR
NOTES:

DATE DRILLED: 07/17/12
JOB NUMBER: 10496.00004
DRILLER/HELPER: Ludwick/MacMurray
DRILL RIG: AMS
LOGGED BY: Graves
CITY: Burton **COUNTY:** Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 3.0) Brown, Dry, SILT and SAND; with concrete and slag			1SS 0-1'			<1	Collected sample at 5-1.5'
					2SS 1-2'			<1	
					3SS 2-3'			<1	
		(3.0 - 6.0) Brown, Dry, SILT; with fine sand, clay and gravel			4SS 3-4'			<1	
					5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	
		(6.0 - 7.5) Brown, Moist, Fine SAND			7SS 6-7'			<1	
		(7.5 - 8.0) Brown, SILT			8SS 7-8'			<1	
		(8.0 - 12.0) Gray, Moist, SILT and CLAY; with plastic			9SS 8-9'			<1	
					10SS 9-10'			<1	
-10.0	10				11SS 10-11'			<1	
					12SS 11-12'			<1	
-15.0	15								

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 6.5'
▼ AT COMPLETION OF DRILLING: NR
▼ AFTER NR HOURS: NR
NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR
AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index
*St = Hand Torvane Shear Strength
*Qp = Pocket Penetrometer
*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB/MW-14-12

BORING LOCATION: SE corner of site

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/17/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Graves

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.0) Brown, Dry, SILT; with fine sand and coarse sand			1SS 0-1'			<1	
					2SS 1-2'			<1	
		(2.0 - 6.5) Hard, Brown, Dry, SILT; with clay and coarse sand			3SS 2-3'			<1	
					4SS 3-4'			<1	
					5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	
		(6.5 - 7.0) Brown, Moist, Fine SAND; trace coarse sand			7SS 6-7'			<1	Collected sample at 6.5-7'
		(7.0 - 12.0) Brown, Wet, Fine to Medium SAND			8SS 7-8'			<1	
					9SS 8-9'			<1	
					10SS 9-10'			<1	
-10.0	10				11SS 10-11'			<1	
					12SS 11-12'			<1	
-15.0	15								

GROUNDWATER OBSERVATIONS

∞ DURING DRILLING: 7'

▼ AT COMPLETION OF DRILLING: NR

▼ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill
CLIENT: Racer Trust
BORING NO: SB-15-12
BORING LOCATION: On hill, by path to air strip
METHOD OF DRILLING: Auger
GROUND ELEVATION: NR
NOTES:

DATE DRILLED: 07/20/12
JOB NUMBER: 10496.00004
DRILLER/HELPER: Ludwick/MacMurray
DRILL RIG: AMS
LOGGED BY: Lambert
CITY: Burton **COUNTY:** Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 4.0) Black Mottled Red and Brown, Dry, Foundry SAND; some organics			1SS 0-1'			<1	
					2SS 1-2'			<1	
					3SS 2-3'			<1	
					4SS 3-4'			<1	
					5SS 4-5'			<1	
-5.0	5	(4.0 - 7.8) Black Mottled Red and Brown, Moist, Foundry SAND; some organics			6SS 5-6'			<1	Collected sample at 5-6'
					7SS 6-7'			<1	
		(7.8 - 8.0) Brown, Moist, Sandy SILT			8SS 7-8'			<1	
		(8.0 - 9.0) Black, Moist, Foundry SAND			9SS 8-9'			<1	
-10.0	10	(9.0 - 10.5) Brownish Orange, Moist, SILT; some fine to medium sand; trace organics			10SS 9-10'			<1	
		(10.5 - 12.0) Brown, Moist, SILT			11SS 10-11'			<1	
		(12.0 - 13.0) Black, Moist, Foundry SAND			12SS 11-12'			<1	Collected sample at 11-12'
		(13.0 - 14.0) Brown, Wet, SILT			13SS 12-13'			<1	
		(14.0 - 16.0) Gray, Moist, CLAY; trace silt			14SS 13-14'			<1	
-15.0	15				15SS 14-15'			<1	
					16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 14'
▼ AT COMPLETION OF DRILLING: NR
▼ AFTER NR HOURS: NR
NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR
AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index
*St = Hand Torvane Shear Strength
*Qp = Pocket Penetrometer
*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB-16-12

BORING LOCATION: Northerly low lying area, near SB-15

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/19/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Lambert

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.5) Brown, Moist, SILT; trace gravel, fine sand and organics			1SS 0-1'			<1	
					2SS 1-2'			<1	
					3SS 2-3'			<1	Collected sample at 2-3'
		(2.5 - 4.0) Brown, Moist, SILT			4SS 3-4'			<1	
					5SS 4-5'			<1	
-5.0	5	(4.0 - 5.0) Brown, Moist, Fine to Medium SAND; some silt			6SS 5-6'			<1	Collected sample at 5-6'
		(5.0 - 6.0) Brown, Moist, SILT; some fine to medium sand			7SS 6-7'			<1	
		(6.0 - 6.5) Brown, Moist, Fine to Coarse SAND; some gravel			8SS 7-8'			<1	
		(6.5 - 9.5) Gray, Wet, Fine to Medium SAND; some silt			9SS 8-9'			<1	
-10.0	10	(9.5 - 12.0) Gray, Wet, CLAY; trace silt			10SS 9-10'			<1	
					11SS 10-11'			<1	
					12SS 11-12'			<1	
		(12.0 - 16.0) Gray, Wet, SILT; some clay			13SS 12-13'			<1	
					14SS 13-14'			<1	
					15SS 14-15'			<1	
-15.0	15				16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 7'

☛ AT COMPLETION OF DRILLING: NR

≡ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB-17-12

BORING LOCATION: End of SB-16

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/19/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Lambert

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.0) Black, Moist, TOPSOIL, SILT and SAND; some organics			1SS 0-1'			<1	
		(2.0 - 2.5) Brown, Moist, Sandy SILT; trace organics			2SS 1-2'			<1	
		(2.5 - 3.8) Brown, Wet, SILT			3SS 2-3'			<1	Collected sample at 2-2.5'
		(3.8 - 10.0) Gray, Wet, Fine to Medium SAND; trace silt			4SS 3-4'			<1	
-5.0	5				5SS 4-5'			<1	
					6SS 5-6'			<1	
					7SS 6-7'			<1	
					8SS 7-8'			<1	
					9SS 8-9'			<1	
-10.0	10	(10.0 - 12.0) Gray, Wet, SILT; some clay			10SS 9-10'			<1	
					11SS 10-11'			<1	
					12SS 11-12'			<1	
-15.0	15								

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 3.5'

☒ AT COMPLETION OF DRILLING: NR

≡ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB-18-12

BORING LOCATION: Off trail near FA-8

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/20/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Lambert

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 3.0) Black, Dry, Foundry FILL; trace organics			1SS 0-1'			<1	
					2SS 1-2'			<1	
					3SS 2-3'			<1	Collected sample at 2-3'
		(3.0 - 4.0) Brown, Dry, Sand and Silt FILL; trace gravel			4SS 3-4'			<1	
		(4.0 - 6.5) Moist, Foundry FILL			5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	
		(6.5 - 8.0) Brown, Dry, SILT			7SS 6-7'			<1	
					8SS 7-8'			<1	
		(8.0 - 11.0) Brown, Moist, SILT; some clay			9SS 8-9'			<1	Collected sample at 8-9'
-10.0	10				10SS 9-10'			<1	
					11SS 10-11'			<1	
		(11.0 - 14.0) Gray, Wet, SILT; some clay			12SS 11-12'			<1	
					13SS 12-13'			<1	
					14SS 13-14'			<1	
-15.0	15	(14.0 - 16.0) Gray, Wet, SILT; trace clay			15SS 14-15'			<1	
					16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 11'

☛ AT COMPLETION OF DRILLING: NR

≡ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB-19-12

BORING LOCATION: Off trail near FA-8

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/20/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Lambert

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 3.0) Black, Dry, Foundry FILL; trace coal pieces			1SS 0-1'			<1	
					2SS 1-2'			<1	
					3SS 2-3'			<1	
		(3.0 - 4.0) Brown, Moist, SAND and SILT; trace organics			4SS 3-4'			<1	Collected sample at 3-4'
		(4.0 - 8.0) Brown, Moist, Sandy SILT; with silt lenses throughout			5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	
					7SS 6-7'			<1	
					8SS 7-8'			<1	
		(8.0 - 9.0) Brown, Moist, SILT; trace clay			9SS 8-9'			<1	
		(9.0 - 10.0) Gray Mottled Red, Moist, SILT; some gravel			10SS 9-10'			<1	
-10.0	10	(10.0 - 11.0) Brown, Moist, SILT			11SS 10-11'			<1	
		(11.0 - 12.0) Gray Mottled Red, Moist, SILT			12SS 11-12'			<1	Collected sample at 11-12'
		(12.0 - 16.0) Gray, Wet, SILT			13SS 12-13'			<1	
					14SS 13-14'			<1	
					15SS 14-15'			<1	
-15.0	15				16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS

⊘ DURING DRILLING: 13'

☛ AT COMPLETION OF DRILLING: NR

⊘ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB-20-12

BORING LOCATION: Off trail near FA-8

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/20/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Lambert

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 1.0) Black, Moist, Foundry Sand FILL; some organics			1SS 0-1'			<1	
		(1.0 - 2.0) Brown, Sandy Silt FILL; some organics			2SS 1-2'			<1	Collected sample at 1-2'
		(2.0 - 8.0)			3SS 2-3'			<1	
					4SS 3-4'			<1	
					5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	
					7SS 6-7'			<1	
					8SS 7-8'			<1	
		(8.0 - 9.0) Brown, Moist, SILT			9SS 8-9'			<1	
		(9.0 - 9.5) Brown/Black, Foundry SAND			10SS 9-10'			<1	Collected sample at 9-9.5'
-10.0	10	(9.5 - 11.0) Brown, SILT; some clay			11SS 10-11'			<1	
		(11.0 - 12.5) Brown, Dry, SILT; with foundry sand			12SS 11-12'			<1	
		(12.5 - 13.0) Gray, Wet, SILT			13SS 12-13'			<1	
-15.0	15								

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 13'

▼ AT COMPLETION OF DRILLING: NR

▼ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB-21-12

BORING LOCATION: Near fence on east central part of site

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/17/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Graves

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.0) Brown, Dry, SILT; with fine sand and coarse sand			1SS 0-1'			<1	Collected sample at 0-2'
					2SS 1-2'			<1	
		(2.0 - 6.0) Hard, Brown, Dry, SILT; with clay and fine sand, trace coarse sand			3SS 2-3'			<1	
					4SS 3-4'			<1	
					5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	
		(6.0 - 7.5) Brown, Moist to Wet, Fine SAND			7SS 6-7'			<1	Collected sample at 6-6.5"
		(7.5 - 8.0) Hard, Brown, Dry, CLAY			8SS 7-8'			<1	
		(8.0 - 13.5) Hard, Gray, Dry, CLAY			9SS 8-9'			<1	
					10SS 9-10'			<1	
-10.0	10				11SS 10-11'			<1	
					12SS 11-12'			<1	
					13SS 12-13'			<1	
					14SS 13-14'			<1	
		(13.5 - 14.5) Gray, Moist, Fine SAND			15SS 14-15'			<1	
-15.0	15	(14.5 - 15.5) Gray, Moist, Silty Fine SAND			16SS 15-16'			<1	
		(15.5 - 16.0) Gray, Moist, Fine SAND							

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 6.5'

☞ AT COMPLETION OF DRILLING: NR

≡ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB-22-12

BORING LOCATION:

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/17/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

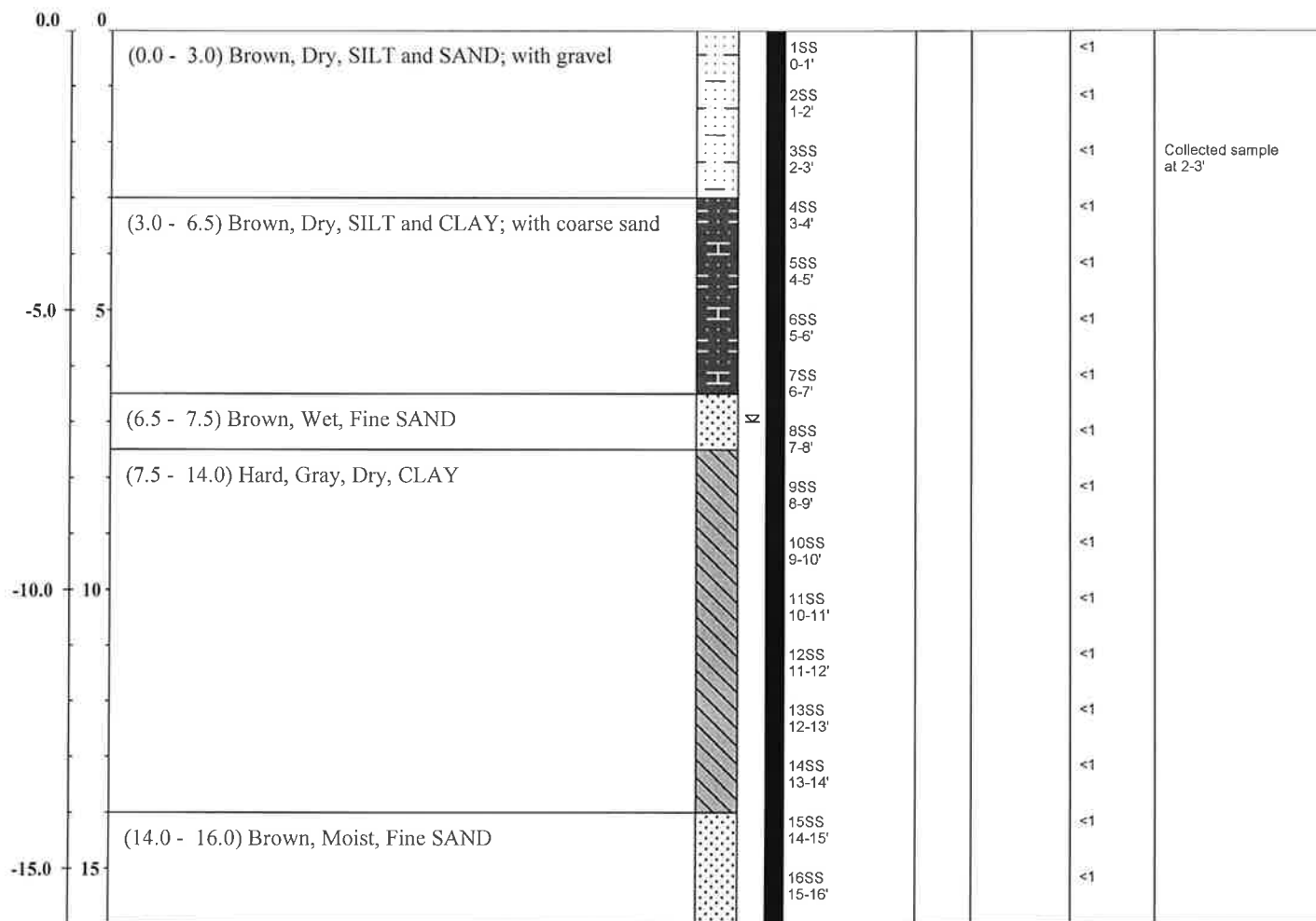
DRILL RIG: AMS

LOGGED BY: Graves

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters



GROUNDWATER OBSERVATIONS

⚡ DURING DRILLING: 7'

⚡ AT COMPLETION OF DRILLING: NR

⚡ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB-23-12

BORING LOCATION:

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/17/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Graves

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 7.0) Brown, Dry, SILT and SAND; with concrete pieces			1SS 0-1'			<1	
		Obstruction at 1'			2SS 1-2'			<1	
					3SS 2-3'			<1	
					4SS 3-4'			<1	
					5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	
					7SS 6-7'			<1	
		(7.0 - 9.0) Hard, Dry, Brown, SILT and CLAY; with coarse sand			8SS 7-8'			<1	
		(9.0 - 9.5) Brown, Moist, Fine SAND and SILT			9SS 8-9'			<1	
-10.0	10	(9.5 - 10.0) Brown, Wet, Fine SAND and SILT			10SS 9-10'			<1	
		(10.0 - 13.0) Gray, Moist, SILT			11SS 10-11'			<1	
					12SS 11-12'			<1	
					13SS 12-13'			<1	
		(13.0 - 16.0) Gray, Moist, CLAY			14SS 13-14'			<1	
-15.0	15				15SS 14-15'			<1	
					16SS 15-16'			<1	

Collected sample
at 1.5-2.5'

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 9.5'

▼ AT COMPLETION OF DRILLING: NR

≡ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB-24-12

BORING LOCATION: Near MW-2

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/16/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Lambert

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.0) Dark Brown, Dry, Foundry FILL; with silt and organics, some gravel			1SS 0-1'			<1	
					2SS 1-2'			1.9	
		(2.0 - 4.0) Dark Brown-Black, Dry, Foundry FILL; with silt and organics, some gravel			3SS 2-3'			<1	
		(4.0 - 4.5) Gray, Moist, CLAY; with silt, trace gravel			4SS 3-4'			12.9	Collected sample at 3-4'
		(4.5 - 12.0) Gray/Brown, Moist, SILT; trace clay and gravel			5SS 4-5'			1	
-5.0	5				6SS 5-6'			<1	
					7SS 6-7'			<1	
		Evidence of foundry debris from 7.5-12'			8SS 7-8'			<1	
					9SS 8-9'			<1	
					10SS 9-10'			<1	
-10.0	10				11SS 10-11'			<1	
					12SS 11-12'			<1	
		(12.0 - 16.0) No recovery - was unable to collect a sample.			13SS 12-13'			<1	
-15.0	15								

GROUNDWATER OBSERVATIONS

∞ DURING DRILLING: NE
 ▼ AT COMPLETION OF DRILLING: NR
 ∞ AFTER NR HOURS: NR
 NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR
 AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index
 *St = Hand Torvane Shear Strength
 *Qp = Pocket Penetrometer
 *Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB-25-12

BORING LOCATION: Near MW-2

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/16/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Graves

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.5) Brown, Dry, SAND and SILT; trace gravel			1SS 0-1'			<1	
					2SS 1-2'			<1	
					3SS 2-3'			<1	
		(2.5 - 5.0) Dark Brown, Dry, Fine SAND and SILT; with concrete pieces			4SS 3-4'			<1	
		Driller reported rocks/concrete from 3-5'			5SS 4-5'			<1	
-5.0	5	(5.0 - 12.0) Black, Dry, SILT and SAND; trace foundry sand, concrete and debris			6SS 5-6'			<1	
					7SS 6-7'			<1	
					8SS 7-8'			<1	
		Driller reported concrete at 8.5'			9SS 8-9'			<1	
					10SS 9-10'			<1	
-10.0	10	White pasty clay material with slight odor encountered from 11-11.5'			11SS 10-11'			<1	
					12SS 11-12'			<1	Collected sample at 11-12'
		(12.0 - 15.0) Gray, CLAY; with silt			13SS 12-13'			<1	
					14SS 13-14'			<1	
					15SS 14-15'			<1	
-15.0	15	(15.0 - 16.0) Gray, Wet, Fine SAND			16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS

⊘ DURING DRILLING: 15.5'

☛ AT COMPLETION OF DRILLING: NR

⊘ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB-26-12

BORING LOCATION: Near MW-2

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/16/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Graves

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.5) Brown, Dry, Sandy SILT; trace gravel			1SS 0-1'			<1	
					2SS 1-2'			<1	
					3SS 2-3'			<1	
		(2.5 - 5.0) Dark Brown, Dry, Fine SAND and SILT; trace broken glass and gravel			4SS 3-4'			<1	
					5SS 4-5'			<1	
-5.0	5	(5.0 - 10.0) Black, Moist, SILT and SAND; trace foundry sand			6SS 5-6'			<1	
					7SS 6-7'			1.2	
					8SS 7-8'			1.9	Collected sample at 7-8'
					9SS 8-9'			1	
					10SS 9-10'			1	
-10.0	10	(10.0 - 13.0) Gray, Moist, SILT and CLAY; trace coarse sand			11SS 10-11'			1	
					12SS 11-12'			1	
					13SS 12-13'			1	
		(13.0 - 16.0) Gray, Wet, Fine SAND becoming more coarse with depth			14SS 13-14'			<1	
					15SS 14-15'			<1	
-15.0	15				16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 13.5'

☞ AT COMPLETION OF DRILLING: NR

≡ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB-27-12

BORING LOCATION: West of SB-28, north of MW-13

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/20/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Lambert

CITY: Burton **COUNTY:** Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 4.0) Brown, Dry becoming Moist, Sand and Silt FILL; some organics, cobbles, slag, and concrete pieces			1SS 0-1'			<1	
					2SS 1-2'			<1	
					3SS 2-3'			<1	Collected sample at 2-3'
					4SS 3-4'			<1	
		(4.0 - 6.0) Moist, Sand and Silt FILL; some cobbles and slag			5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	
		(6.0 - 8.0) Dark Brown Mottled Red, Moist, Clayey SILT; some slag, cobbles and wood debris			7SS 6-7'			<1	Collected sample at 6-7'
					8SS 7-8'			<1	
		(8.0 - 11.0) Gray, Wet, Sandy SILT; trace gravel			9SS 8-9'			<1	
-10.0	10				10SS 9-10'			<1	
					11SS 10-11'			<1	
		(11.0 - 15.8) Gray, Wet, SILT; some sand			12SS 11-12'			<1	
					13SS 12-13'			<1	
					14SS 13-14'			<1	
					15SS 14-15'			<1	
-15.0	15	(15.8 - 16.0) Gray, Moist, CLAY			16SS 15-16'			<1	

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 8.5'

▼ AT COMPLETION OF DRILLING: NR

▼ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine



SOIL BORING LOG

5859 Sherman Road
Saginaw, MI 48604
989-752-6500
989-752-6600 fax

PROJECT: Davison Road Industrial Landfill

CLIENT: Racer Trust

BORING NO: SB-28-12

BORING LOCATION: Far east soil boring, north of MW-14

METHOD OF DRILLING: Auger

GROUND ELEVATION: NR

NOTES:

DATE DRILLED: 07/19/12

JOB NUMBER: 10496.00004

DRILLER/HELPER: Ludwick/MacMurray

DRILL RIG: AMS

LOGGED BY: Lambert

CITY: Burton

COUNTY: Genesee

Elevation	Depth (ft)	Material Description	Soil Type	Water Level	Sample #/Type Sample Depth SPT Results (N-Value) % REC.	Moisture %	Unconfined Comp. Strength* (tsf)	PID (ppm)	Analytical Parameters
0.0	0	(0.0 - 2.0) Brown, Dry, SAND and SILT; trace plastic debris and concrete			1SS 0-1'			<1	
					2SS 1-2'			<1	
		(2.0 - 4.0) Brown, Dry, SILT and SAND; trace gravel			3SS 2-3'			<1	Collected sample at 2-3'
					4SS 3-4'			<1	
		(4.0 - 6.0) Brown, Moist, SILT and SAND; trace organics and cobbles			5SS 4-5'			<1	
-5.0	5				6SS 5-6'			<1	
		(6.0 - 8.0) Brown/Orange, Moist, Fine to Medium SAND			7SS 6-7'			<1	Collected sample at 6-7'
					8SS 7-8'			<1	
		(8.0 - 10.5) Brown, Wet, SILT			9SS 8-9'			<1	
					10SS 9-10'			<1	
-10.0	10				11SS 10-11'			<1	
		(10.5 - 15.0) Gray, Wet, Silty CLAY			12SS 11-12'			<1	
					13SS 12-13'			<1	
					14SS 13-14'			<1	
					15SS 14-15'			<1	
-15.0	15				16SS 15-16'			<1	
		(15.0 - 16.0) Gray, CLAY; trace silt							

GROUNDWATER OBSERVATIONS

≡ DURING DRILLING: 9'

☛ AT COMPLETION OF DRILLING: NR

≡ AFTER NR HOURS: NR

NE - Not Encountered NR - Not Recorded

HOLE COLLAPSE

AT COMPLETION: NR

AFTER NR HOURS: NR

BACKFILL: Native Soils and/or Bentonite Chips

*LL = Liquid Limit - PI = Plasticity Index

*St = Hand Torvane Shear Strength

*Qp = Pocket Penetrometer

*Qu = Unconfined Compression Machine

APPENDIX B

STATIC GROUNDWATER ELEVATION DATA

STATIC WATER LEVEL TABLE
August 7, 2012
DAVISON ROAD LANDFILL
DAVISON AND DONEGAL ROAD BURTON, MI

Date	Well	Ground Elevation at Well (ft.)	Well Depth to Bottom (ft.)	Well Top of Casing Elevation (ft.)	Depth to Water (ft.)	Static Water Level Elevation (ft.)
8/7/2012	MW-1-12	759.28	12.84	762.66	12.36	750.30
8/7/2012	MW-2-12	756.29	11.67	759.75	10.29	749.46
8/7/2012	MW-3-12	750.37	10.18	753.62	8.07	745.55
8/7/2012	MW-4-12	750.87	11.28	753.89	9.02	744.87
8/7/2012	MW-5-12	760.91	16.43	764.37	13.20	751.17
8/7/2012	MW-6-12	757.97	20.20	761.11	18.64	742.47
8/7/2012	MW-7-12	752.35	13.90	755.48	10.58	744.90
8/7/2012	MW-8-12	754.99	13.95	758.47	DRY	DRY
8/7/2012	MW-9-12	752.23	15.30	755.52	10.57	744.95
8/7/2012	MW-10-12	751.93	10.38	755.33	8.97	746.36
8/7/2012	MW-11-12	754.66	13.91	758.02	DRY	DRY
8/7/2012	MW-12-12	761.07	19.33	764.44	14.58	749.86
8/7/2012	MW-13-12	761.89	13.77	765.27	12.10	753.17
8/7/2012	MW-14-12	761.84	13.13	765.11	11.60	753.51
8/7/2012	MW-1	760.37	15.54	762.58	11.05	751.53
8/7/2012	MW-2	763.82	17.87	766.11	14.96	751.15
8/7/2012	MW-04	761.14	15.28	763.55	14.65	748.90
8/7/2012	TW-1	753.09	15.20	756.01	10.11	745.90
8/7/2012	TW-6	754.17	12.92	756.43	10.52	745.91

Could not locate TW-8.

STATIC WATER LEVEL TABLE
11/6/2012
DAVISON ROAD LANDFILL
DAVISON AND DONEGAL ROAD BURTON, MI.

Date	Well	Ground Elevation at Well (ft.)	Well Depth to Bottom (ft.)	Well Top of Casing Elevation (ft.)	Depth to Water (ft.)	Static Water Level Elevation (ft.)
11/6/2012	MW-1-12	759.28	12.84	762.66	10.64	752.02
11/6/2012	MW-2-12	756.29	11.67	759.75	5.82	753.93
11/6/2012	MW-3-12	750.37	10.18	753.62	7.00	746.62
11/6/2012	MW-4-12	750.87	11.28	753.89	8.70	745.19
11/6/2012	MW-5-12	760.91	16.43	764.37	14.27	750.10
11/6/2012	MW-6-12	757.97	20.20	761.11	19.00	742.11
11/6/2012	MW-7-12	752.35	13.90	755.48	11.93	743.55
11/6/2012	MW-8-12	754.99	13.95	758.47	DRY	DRY
11/6/2012	MW-9-12	752.23	15.30	755.52	11.91	743.61
11/6/2012	MW-10-12	751.93	10.38	755.33	10.07	745.26
11/6/2012	MW-11-12	754.66	13.91	758.02	DRY	DRY
11/6/2012	MW-12-12	761.07	19.33	764.44	12.81	751.63
11/6/2012	MW-13-12	761.89	13.77	765.27	11.11	754.16
11/6/2012	MW-14-12	761.84	13.13	765.11	11.04	754.07
11/6/2012	MW-1	760.37	15.54	762.58	12.40	750.18
11/6/2012	MW-2	763.82	17.87	766.11	15.04	751.07
11/6/2012	MW-04	761.14	15.28	763.55	15.11	748.44
11/6/2012	TW-1	753.09	15.20	756.01	9.29	746.72
11/6/2012	TW-6	754.17	12.92	756.43	9.88	746.55

Could not locate TW-8.

STATIC WATER LEVEL TABLE
April 16, 2013
DAVISON ROAD LANDFILL
DAVISON AND DONEGAL ROAD BURTON, MI.

Date	Well	Ground Elevation at Well (ft.)	Well Depth to Bottom (ft.)	Well Top of Casing Elevation (ft.)	Depth to Water (ft.)	Static Water Level Elevation (ft.)
4/16/2013	MW-1-12	759.28	12.84	762.66	4.20	758.46
4/16/2013	MW-2-12	756.29	11.67	759.75	4.86	754.89
4/16/2013	MW-3-12	750.37	10.18	753.62	5.16	748.46
4/16/2013	MW-4-12	750.87	11.28	753.89	3.68	750.21
4/16/2013	MW-5-12	760.91	16.43	764.37	8.11	756.26
4/16/2013	MW-6-12	757.97	20.20	761.11	13.95	747.16
4/16/2013	MW-7-12	752.35	13.90	755.48	3.94	751.54
4/16/2013	MW-8-12	754.99	13.95	758.47	5.81	752.66
4/16/2013	MW-9-12	752.23	15.30	755.52	3.91	751.61
4/16/2013	MW-10-12	751.93	10.38	755.33	3.04	752.29
4/16/2013	MW-11-12	754.66	13.91	758.02	5.55	752.47
4/16/2013	MW-12-12	761.07	19.33	764.44	10.71	753.73
4/16/2013	MW-13-12	761.89	13.77	765.27	6.61	758.66
4/16/2013	MW-14-12	761.84	13.13	765.11	6.80	758.31
4/16/2013	MW-1	760.37	15.54	762.58	5.81	756.77
4/16/2013	MW-2	763.82	17.87	766.11	11.81	754.30
4/16/2013	MW-04	761.14	15.28	763.55	12.00	751.55
4/16/2013	TW-1	753.09	15.20	756.01	6.98	749.03
4/16/2013	TW-6	754.17	12.92	756.43	6.31	750.12

Could not locate TW-8.

STATIC WATER LEVEL TABLE
July 7, 2013
DAVISON ROAD LANDFILL
DAVISON AND DONEGAL ROAD BURTON, MI

Date	Well	Ground Elevation at Well (ft.)	Well Depth to Bottom (ft.)	Well Top of Casing Elevation (ft.)	Depth to Water (ft.)	Static Water Level Elevation (ft.)
7/22/2013	MW-1-12	759.28	12.84	762.66	9.65	753.01
7/22/2013	MW-2-12	756.29	11.67	759.75	7.99	751.76
7/22/2013	MW-3-12	750.37	10.18	753.62	7.39	746.23
7/22/2013	MW-4-12	750.87	11.28	753.89	6.88	747.01
7/22/2013	MW-5-12	760.91	16.43	764.37	40.66	723.71
7/22/2013	MW-6-12	757.97	20.20	761.11	16.39	744.72
7/22/2013	MW-7-12	752.35	13.90	755.48	7.76	747.72
7/22/2013	MW-8-12	754.99	13.95	758.47	11.10	747.37
7/22/2013	MW-9-12	752.23	15.30	755.52	7.62	747.90
7/22/2013	MW-10-12	751.93	10.38	755.33	6.90	748.43
7/22/2013	MW-11-12	754.66	13.91	758.02	9.08	748.94
7/22/2013	MW-12-12	761.07	19.33	764.44	12.04	752.40
7/22/2013	MW-13-12	761.89	13.77	765.27	9.86	755.41
7/22/2013	MW-14-12	761.84	13.13	765.11	8.38	756.73
7/22/2013	MW-1	760.37	15.54	762.58	7.76	754.82
7/22/2013	MW-2	763.82	17.87	766.11	12.99	753.12
7/22/2013	MW-04	761.14	15.28	763.55	12.34	751.21
7/22/2013	TW-1	753.09	15.20	756.01	9.19	746.82
7/22/2013	TW-6	754.17	12.92	756.43		756.43

Could not locate TW-8.

APPENDIX C

LABORATORY REPORTS-SOIL



Analytical Laboratory Report

Report ID: S53286.01(01)
Generated on 08/03/2012

Report to

Attention: Bob Zwald
Wilcox
37871 Interchange Drive
Farmington Hills, MI 48335

Phone: 248-330-7844 FAX: 248-478-3986
Email: Bob.Zwald@Wilcox.us

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S53286.01-S53286.44
Project: Racer Davison Road Landfill
Collected Date: 07/16/2012 - 07/20/2012
Submitted Date/Time: 07/23/2012 15:00
Sampled by: Laura Lambert
P.O. #: PO133645

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Samples are held by the lab for 30 days from the sample submittal date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#L11-184), WBENC (#2005110032)
Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814), NELAC FL (#E871045)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (44 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S53286.01	SB/MW-2-12(14'-15')	Soil	07/16/2012 12:53
S53286.02	SB-24-12(3'-4')	Soil	07/16/2012 13:37
S53286.03	SB-26-12(7'-8')	Soil	07/16/2012 15:45
S53286.04	Duplicate 1	Soil	07/16/2012 00:01
S53286.05	SB/MW-1-12 (7'-7.5')	Soil	07/17/2012 09:00
S53286.06	SB-25-12(11'-12')	Soil	07/17/2012 09:15
S53286.07	SB/MW-14-12(6.5'-7')	Soil	07/17/2012 10:20
S53286.08	SB-21-12 (0'-2')	Soil	07/17/2012 11:00
S53286.09	SB-21-12 (6'-6.5')	Soil	07/17/2012 11:05
S53286.10	SB/MW-13-12 (0.5'-1.5')	Soil	07/17/2012 11:30
S53286.11	Duplicate 2	Soil	07/17/2012 00:01
S53286.12	SB-23-12(1.5'-2.5')	Soil	07/17/2012 12:30
S53286.13	SB/MW-12-12(8.5'-9.5')	Soil	07/17/2012 13:00
S53286.14	SB-22-12(2'-3')	Soil	07/17/2012 14:00
S53286.15	SB/MW-6-12(14'-15')	Soil	07/17/2012 17:00
S53286.16	SB/MW-10(2'-3')	Soil	07/18/2012 10:48
S53286.17	SB/MW-9(6'-8')	Soil	07/18/2012 11:42
S53286.18	SB/MW-8(5'-6')	Soil	07/18/2012 12:43
S53286.19	SB/MW-7(2'-3')	Soil	07/19/2012 10:30
S53286.20	SB/MW-7(4'-5')	Soil	07/19/2012 10:34
S53286.21	SB/MW-4-12(2'-3')	Soil	07/19/2012 11:33
S53286.22	SB/MW-4-12(2'-3') DUP	Soil	07/19/2012 11:33
S53286.23	SB-16-12(2'-3')	Soil	07/19/2012 14:50
S53286.24	SB-16-12(5'-6')	Soil	07/19/2012 14:54
S53286.25	SB-17-12(2'-2.5')	Soil	07/19/2012 15:50
S53286.26	SB/MW-11-12(2'-3')	Soil	07/19/2012 16:45
S53286.27	SB/MW-11-12(6'-7')	Soil	07/19/2012 16:50
S53286.28	SB/MW-3-12(3'-4')	Soil	07/19/2012 17:36
S53286.29	SB-28-12(2'-3')	Soil	07/19/2012 18:40
S53286.30	SB-28-12(6'-7')	Soil	07/19/2012 18:45
S53286.31	SB-27-12(2'-3')	Soil	07/20/2012 10:05
S53286.32	SB-27-12(6'-7')	Soil	07/20/2012 10:11
S53286.33	SB-18-12(2'-3')	Soil	07/20/2012 11:03
S53286.34	SB-18-12(8'-9')	Soil	07/20/2012 11:07
S53286.35	SB-18-12(8'-9') DUP	Soil	07/20/2012 11:07
S53286.36	SB-19-12(3'-4')	Soil	07/20/2012 12:02
S53286.37	SB-19-12(11'-12')	Soil	07/20/2012 12:10
S53286.38	SB-20-12(1'-2')	Soil	07/20/2012 13:30
S53286.39	SB-20-12(9'-9.5')	Soil	07/20/2012 13:36
S53286.40	SB/MW-5-12(3'-4')	Soil	07/20/2012 15:38
S53286.41	SB/MW-5-12(9'10')	Soil	07/20/2012 15:46
S53286.42	SB-15-12(5'-6')	Soil	07/20/2012 17:03
S53286.43	SB-15-12(11'-12')	Soil	07/20/2012 17:07
S53286.44	Trip Blank	Methanol	07/20/2012 17:13



Analytical Laboratory Report

Lab Sample ID: S53286.01
Sample Tag: SB/MW-2-12(14'-15')
Collected Date/Time: 07/16/2012 12:53
Matrix: Soil
COC Reference: 67835

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	82	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	885	mg/kg	2.2	SW6020	07/31/12 13:14	SLS	7429-90-5	
Arsenic	6.11	mg/kg	0.10	SW6020	07/30/12 17:44	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 17:44	SLS	7440-43-9	
Chromium	2.82	mg/kg	0.50	SW6020	07/30/12 17:44	SLS	7440-47-3	
Cobalt	3.38	mg/kg	0.50	SW6020	07/30/12 17:44	SLS	7440-48-4	
Copper	9.30	mg/kg	1.0	SW6020	07/30/12 17:44	SLS	7440-50-8	
Iron	7,880	mg/kg	5.6	SW6020	07/31/12 13:14	SLS	7439-89-6	
Manganese	390	mg/kg	0.50	SW6020	07/30/12 17:44	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 13:22	JRT	7439-97-6	
Vanadium	6.17	mg/kg	0.50	SW6020	07/30/12 17:44	SLS	7440-62-2	
Zinc	24.2	mg/kg	1.0	SW6020	07/30/12 17:44	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 14:23	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.01 (continued)

Sample Tag: SB/MW-2-12(14'-15')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 14:23	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	105-67-9	
Dimethyl phthalate	341	ug/kg	330	SW8270C	08/01/12 14:23	PL	131-11-3	B
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 14:23	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 14:23	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 14:23	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 14:23	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 14:23	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 14:23	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:23	PL	88-06-2	

Organics - Volatiles

Volatile Organics 5035

Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/30/12 15:42	WAT	60-29-7	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S53286.01 (continued)

Sample Tag: SB/MW-2-12(14'-15')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/30/12 15:42	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	400	SW8260B/5035	07/30/12 15:42	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/30/12 15:42	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	1,100	SW8260B/5035	07/30/12 15:42	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 15:42	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 15:42	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/30/12 15:42	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 15:42	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/30/12 15:42	WAT	109-99-9	
Chloroform	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	4,000	SW8260B/5035	07/30/12 15:42	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	4,000	SW8260B/5035	07/30/12 15:42	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	56-23-5	
Benzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 15:42	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/30/12 15:42	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT		
o-Xylene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	95-47-6	
Styrene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/30/12 15:42	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	96-18-4	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.01 (continued)

Sample Tag: SB/MW-2-12(14'-15')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 15:42	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 15:42	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 15:42	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 15:42	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	490	SW8260B/5035	07/30/12 15:42	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	490	SW8260B/5035	07/30/12 15:42	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	490	SW8260B/5035	07/30/12 15:42	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	490	SW8260B/5035	07/30/12 15:42	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.02
Sample Tag: SB-24-12(3'-4')
Collected Date/Time: 07/16/2012 13:37
Matrix: Soil
COC Reference: 67835

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		
PNA Extraction	Completed			3550B	07/27/12 11:00	CCM		

Inorganics

Total Solids	93	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	3,070	mg/kg	1.9	SW6020	07/31/12 13:17	SLS	7429-90-5	
Arsenic	2.57	mg/kg	0.10	SW6020	07/30/12 17:48	SLS	7440-38-2	
Cadmium	0.31	mg/kg	0.20	SW6020	07/30/12 17:48	SLS	7440-43-9	
Chromium	26.8	mg/kg	0.50	SW6020	07/30/12 17:48	SLS	7440-47-3	
Cobalt	1.80	mg/kg	0.50	SW6020	07/30/12 17:48	SLS	7440-48-4	
Copper	24.6	mg/kg	1.0	SW6020	07/30/12 17:48	SLS	7440-50-8	
Iron	5,570	mg/kg	4.8	SW6020	07/31/12 13:17	SLS	7439-89-6	
Manganese	1,260	mg/kg	0.50	SW6020	07/30/12 17:48	SLS	7439-96-5	
Mercury	0.065	mg/kg	0.050	SW7471A	07/27/12 13:24	JRT	7439-97-6	
Vanadium	10.3	mg/kg	0.50	SW6020	07/30/12 17:48	SLS	7440-62-2	
Zinc	57.8	mg/kg	1.0	SW6020	07/30/12 17:48	SLS	7440-66-6	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	500	SW8270C	07/31/12 19:12	PL	83-32-9	X
Acenaphthylene	Not detected	ug/kg	500	SW8270C	07/31/12 19:12	PL	208-96-8	X
Anthracene	Not detected	ug/kg	500	SW8270C	07/31/12 19:12	PL	120-12-7	X
Benzo(a)anthracene	1,000	ug/kg	500	SW8270C	07/31/12 19:12	PL	56-55-3	X
Benzo(a)pyrene	1,800	ug/kg	500	SW8270C	07/31/12 19:12	PL	50-32-8	IX
Benzo(b)fluoranthene	3,500	ug/kg	500	SW8270C	07/31/12 19:12	PL	205-99-2	IpX
Benzo(k)fluoranthene	3,800	ug/kg	500	SW8270C	07/31/12 19:12	PL	207-08-9	IpX
Benzo(ghi)perylene	Not detected	ug/kg	500	SW8270C	07/31/12 19:12	PL	191-24-2	IX
Chrysene	1,800	ug/kg	500	SW8270C	07/31/12 19:12	PL	218-01-9	X
Dibenzo(ah)anthracene	Not detected	ug/kg	500	SW8270C	07/31/12 19:12	PL	53-70-3	IX
Fluoranthene	1,200	ug/kg	500	SW8270C	07/31/12 19:12	PL	206-44-0	X
Fluorene	Not detected	ug/kg	500	SW8270C	07/31/12 19:12	PL	86-73-7	X
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	500	SW8270C	07/31/12 19:12	PL	193-39-5	IX
Naphthalene	Not detected	ug/kg	500	SW8270C	07/31/12 19:12	PL	91-20-3	X
Phenanthrene	Not detected	ug/kg	500	SW8270C	07/31/12 19:12	PL	85-01-8	X
Pyrene	1,700	ug/kg	500	SW8270C	07/31/12 19:12	PL	129-00-0	X
2-Methylnaphthalene	Not detected	ug/kg	500	SW8270C	07/31/12 19:12	PL	91-57-6	X

X-Elevated reporting limit due to matrix interference

I-Matrix interference with internal standard

p-Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.



Analytical Laboratory Report

Lab Sample ID: S53286.02 (continued)

Sample Tag: SB-24-12(3'-4')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Polynuclear Aromatics (continued)								
1-Methylnaphthalene	Not detected	ug/kg	500	SW8270C	07/31/12 19:12	PL	90-12-0	X
Polynuclear Aromatics (Replicate 01)								
Acenaphthene	Not detected	ug/kg	700	SW8270C	08/02/12 00:03	PL	83-32-9	X
Acenaphthylene	Not detected	ug/kg	700	SW8270C	08/02/12 00:03	PL	208-96-8	X
Anthracene	Not detected	ug/kg	700	SW8270C	08/02/12 00:03	PL	120-12-7	X
Benzo(a)anthracene	1,300	ug/kg	700	SW8270C	08/02/12 00:03	PL	56-55-3	X
Benzo(a)pyrene	1,900	ug/kg	700	SW8270C	08/02/12 00:03	PL	50-32-8	X
Benzo(b)fluoranthene	3,700	ug/kg	700	SW8270C	08/02/12 00:03	PL	205-99-2	Xp
Benzo(k)fluoranthene	4,000	ug/kg	700	SW8270C	08/02/12 00:03	PL	207-08-9	Xp
Benzo(ghi)perylene	Not detected	ug/kg	700	SW8270C	08/02/12 00:03	PL	191-24-2	X
Chrysene	2,400	ug/kg	700	SW8270C	08/02/12 00:03	PL	218-01-9	X
Dibenzo(ah)anthracene	Not detected	ug/kg	700	SW8270C	08/02/12 00:03	PL	53-70-3	X
Fluoranthene	1,800	ug/kg	700	SW8270C	08/02/12 00:03	PL	206-44-0	X
Fluorene	Not detected	ug/kg	700	SW8270C	08/02/12 00:03	PL	86-73-7	X
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	700	SW8270C	08/02/12 00:03	PL	193-39-5	X
Naphthalene	Not detected	ug/kg	700	SW8270C	08/02/12 00:03	PL	91-20-3	X
Phenanthrene	800	ug/kg	700	SW8270C	08/02/12 00:03	PL	85-01-8	X
Pyrene	2,000	ug/kg	700	SW8270C	08/02/12 00:03	PL	129-00-0	X
2-Methylnaphthalene	Not detected	ug/kg	700	SW8270C	08/02/12 00:03	PL	91-57-6	X
1-Methylnaphthalene	Not detected	ug/kg	700	SW8270C	08/02/12 00:03	PL	90-12-0	X
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:03	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/30/12 16:03	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	07/30/12 16:03	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:03	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	900	SW8260B/5035	07/30/12 16:03	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/30/12 16:03	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	07/30/12 16:03	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:03	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	07/30/12 16:03	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/30/12 16:03	WAT	109-99-9	
Chloroform	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	07/30/12 16:03	WAT	108-10-1	

X-Elevated reporting limit due to matrix interference

p-Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.



Analytical Laboratory Report

Lab Sample ID: S53286.02 (continued)

Sample Tag: SB-24-12(3'-4')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	07/30/12 16:03	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	56-23-5	
Benzene	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	07/30/12 16:03	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	110	SW8260B/5035	07/30/12 16:03	WAT	110-57-6	X
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	20	SW8260B/5035	07/30/12 16:03	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT		
o-Xylene	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	95-47-6	
Styrene	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/30/12 16:03	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	75-25-2	
1,1,1,2,2-Tetrachloroethane	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:03	WAT	79-34-5	X
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:03	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/30/12 16:03	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:03	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	07/30/12 16:03	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:03	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:03	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:03	WAT	91-20-3	
2-Methylnaphthalene	790	ug/kg	400	SW8260B/5035	07/30/12 16:03	WAT	91-57-6	

X-Elevated reporting limit due to matrix interference

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.03
Sample Tag: SB-26-12(7'-8')
Collected Date/Time: 07/16/2012 15:45
Matrix: Soil
COC Reference: 67835

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		
PNA Extraction	Completed			3550B	07/27/12 11:00	CCM		

Inorganics

Total Solids	78	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	809	mg/kg	4.8	SW6020	07/31/12 13:20	SLS	7429-90-5	
Arsenic	1.12	mg/kg	0.10	SW6020	07/30/12 17:51	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 17:51	SLS	7440-43-9	
Chromium	41.5	mg/kg	0.50	SW6020	07/30/12 17:51	SLS	7440-47-3	
Cobalt	1.87	mg/kg	0.50	SW6020	07/30/12 17:51	SLS	7440-48-4	
Copper	24.4	mg/kg	1.0	SW6020	07/30/12 17:51	SLS	7440-50-8	
Iron	24,100	mg/kg	12	SW6020	07/31/12 13:20	SLS	7439-89-6	
Manganese	302	mg/kg	0.50	SW6020	07/30/12 17:51	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 13:26	JRT	7439-97-6	
Vanadium	4.02	mg/kg	0.50	SW6020	07/30/12 17:51	SLS	7440-62-2	
Zinc	11.3	mg/kg	1.0	SW6020	07/30/12 17:51	SLS	7440-66-6	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	193-39-5	
Naphthalene	400	ug/kg	300	SW8270C	07/31/12 18:04	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 18:04	PL	90-12-0	



Analytical Laboratory Report

Lab Sample ID: S53286.03 (continued)

Sample Tag: SB-26-12(7'-8')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/30/12 16:23	WAT	60-29-7	
Acetone	Not detected	ug/kg	2,000	SW8260B/5035	07/30/12 16:23	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:23	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/30/12 16:23	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	1,200	SW8260B/5035	07/30/12 16:23	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:23	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:23	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/30/12 16:23	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:23	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	2,000	SW8260B/5035	07/30/12 16:23	WAT	109-99-9	
Chloroform	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	4,000	SW8260B/5035	07/30/12 16:23	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	4,000	SW8260B/5035	07/30/12 16:23	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	56-23-5	
Benzene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:23	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	10061-01-5	
Toluene	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/30/12 16:23	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT		
o-Xylene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	95-47-6	
Styrene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:23	WAT	98-82-8	
Bromoform	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	79-34-5	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.03 (continued)

Sample Tag: SB-26-12(7'-8')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,2,3-Trichloropropane	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/30/12 16:23	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/30/12 16:23	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	500	SW8260B/5035	07/30/12 16:23	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:23	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	520	SW8260B/5035	07/30/12 16:23	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	520	SW8260B/5035	07/30/12 16:23	WAT	87-61-6	
Naphthalene	1,890	ug/kg	520	SW8260B/5035	07/30/12 16:23	WAT	91-20-3	
2-Methylnaphthalene	950	ug/kg	520	SW8260B/5035	07/30/12 16:23	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.04
Sample Tag: Duplicate 1
Collected Date/Time: 07/16/2012 00:01
Matrix: Soil
COC Reference: 67835

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		
PNA Extraction	Completed			3550B	07/27/12 11:00	CCM		

Inorganics

Total Solids	83	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	479	mg/kg	2.2	SW6020	07/31/12 13:23	SLS	7429-90-5	
Arsenic	0.79	mg/kg	0.10	SW6020	07/30/12 17:54	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 17:54	SLS	7440-43-9	
Chromium	21.2	mg/kg	0.50	SW6020	07/30/12 17:54	SLS	7440-47-3	
Cobalt	1.05	mg/kg	0.50	SW6020	07/30/12 17:54	SLS	7440-48-4	
Copper	9.86	mg/kg	1.0	SW6020	07/30/12 17:54	SLS	7440-50-8	
Iron	14,100	mg/kg	5.6	SW6020	07/31/12 13:23	SLS	7439-89-6	
Manganese	125	mg/kg	0.50	SW6020	07/30/12 17:54	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 13:28	JRT	7439-97-6	
Vanadium	2.59	mg/kg	0.50	SW6020	07/30/12 17:54	SLS	7440-62-2	
Zinc	17.8	mg/kg	1.0	SW6020	07/30/12 17:54	SLS	7440-66-6	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 18:50	PL	90-12-0	



Analytical Laboratory Report

Lab Sample ID: S53286.04 (continued)

Sample Tag: Duplicate 1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/30/12 16:43	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/30/12 16:43	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:43	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/30/12 16:43	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	1,100	SW8260B/5035	07/30/12 16:43	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:43	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:43	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/30/12 16:43	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:43	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/30/12 16:43	WAT	109-99-9	
Chloroform	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	4,000	SW8260B/5035	07/30/12 16:43	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	4,000	SW8260B/5035	07/30/12 16:43	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	56-23-5	
Benzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:43	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/30/12 16:43	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT		
o-Xylene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	95-47-6	
Styrene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:43	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	79-34-5	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.04 (continued)

Sample Tag: Duplicate 1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 16:43	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 16:43	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:43	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 16:43	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	480	SW8260B/5035	07/30/12 16:43	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	480	SW8260B/5035	07/30/12 16:43	WAT	87-61-6	
Naphthalene	1,630	ug/kg	480	SW8260B/5035	07/30/12 16:43	WAT	91-20-3	
2-Methylnaphthalene	600	ug/kg	480	SW8260B/5035	07/30/12 16:43	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.05
Sample Tag: SB/MW-1-12 (7'-7.5')
Collected Date/Time: 07/17/2012 09:00
Matrix: Soil
COC Reference: 67835

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	83	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	2,440	mg/kg	2.2	SW6020	07/31/12 13:26	SLS	7429-90-5	
Arsenic	1.40	mg/kg	0.10	SW6020	07/30/12 17:58	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 17:58	SLS	7440-43-9	
Chromium	3.50	mg/kg	0.50	SW6020	07/30/12 17:58	SLS	7440-47-3	
Cobalt	2.51	mg/kg	0.50	SW6020	07/30/12 17:58	SLS	7440-48-4	
Copper	5.49	mg/kg	1.0	SW6020	07/30/12 17:58	SLS	7440-50-8	
Iron	3,050	mg/kg	5.6	SW6020	07/31/12 13:26	SLS	7439-89-6	
Manganese	109	mg/kg	0.50	SW6020	07/30/12 17:58	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 13:30	JRT	7439-97-6	
Vanadium	5.46	mg/kg	0.50	SW6020	07/30/12 17:58	SLS	7440-62-2	
Zinc	15.1	mg/kg	1.0	SW6020	07/30/12 17:58	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 14:57	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.05 (continued)

Sample Tag: SB/MW-1-12 (7'-7.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 14:57	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 14:57	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 14:57	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 14:57	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 14:57	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 14:57	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 14:57	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 14:57	PL	88-06-2	
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/30/12 18:52	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/30/12 18:52	WAT	67-64-1	



Analytical Laboratory Report

Lab Sample ID: S53286.05 (continued)

Sample Tag: SB/MW-1-12 (7'-7.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	400	SW8260B/5035	07/30/12 18:52	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/30/12 18:52	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	1,100	SW8260B/5035	07/30/12 18:52	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 18:52	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 18:52	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/30/12 18:52	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 18:52	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/30/12 18:52	WAT	109-99-9	
Chloroform	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	4,000	SW8260B/5035	07/30/12 18:52	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	4,000	SW8260B/5035	07/30/12 18:52	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	56-23-5	
Benzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 18:52	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/30/12 18:52	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT		
o-Xylene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	95-47-6	
Styrene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/30/12 18:52	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	103-65-1	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.05 (continued)

Sample Tag: SB/MW-1-12 (7'-7.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/30/12 18:52	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/30/12 18:52	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 18:52	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	400	SW8260B/5035	07/30/12 18:52	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	470	SW8260B/5035	07/30/12 18:52	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	470	SW8260B/5035	07/30/12 18:52	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	470	SW8260B/5035	07/30/12 18:52	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	470	SW8260B/5035	07/30/12 18:52	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.06
Sample Tag: SB-25-12(11'-12')
Collected Date/Time: 07/17/2012 09:15
Matrix: Soil
COC Reference: 67835

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		
PNA Extraction	Completed			3550B	07/27/12 11:00	CCM		

Inorganics

Total Solids	80	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	2,070	mg/kg	2.4	SW6020	07/31/12 13:29	SLS	7429-90-5	
Arsenic	0.61	mg/kg	0.10	SW6020	07/30/12 18:01	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 18:01	SLS	7440-43-9	
Chromium	2.21	mg/kg	0.50	SW6020	07/30/12 18:01	SLS	7440-47-3	
Cobalt	1.74	mg/kg	0.50	SW6020	07/30/12 18:01	SLS	7440-48-4	
Copper	4.92	mg/kg	1.0	SW6020	07/30/12 18:01	SLS	7440-50-8	
Iron	3,380	mg/kg	5.9	SW6020	07/31/12 13:29	SLS	7439-89-6	
Manganese	101	mg/kg	0.50	SW6020	07/30/12 18:01	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 13:33	JRT	7439-97-6	
Vanadium	6.05	mg/kg	0.50	SW6020	07/30/12 18:01	SLS	7440-62-2	
Zinc	15.2	mg/kg	1.0	SW6020	07/30/12 18:01	SLS	7440-66-6	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 13:32	PL	90-12-0	



Analytical Laboratory Report

Lab Sample ID: S53286.06 (continued)

Sample Tag: SB-25-12(11'-12')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:28	WAT	60-29-7	
Acetone	Not detected	ug/kg	2,000	SW8260B/5035	07/31/12 14:28	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	400	SW8260B/5035	07/31/12 14:28	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:28	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:28	WAT	107-13-1	X
2-Butanone (MEK)	Not detected	ug/kg	1,200	SW8260B/5035	07/31/12 14:28	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 14:28	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 14:28	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:28	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 14:28	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	2,000	SW8260B/5035	07/31/12 14:28	WAT	109-99-9	
Chloroform	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 14:28	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 14:28	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	56-23-5	
Benzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 14:28	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	10061-01-5	
Toluene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/31/12 14:28	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	630-20-6	
Ethylbenzene	1,280	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT		
o-Xylene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	95-47-6	
Styrene	9,150	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	100-42-5	
Isopropylbenzene	800	ug/kg	400	SW8260B/5035	07/31/12 14:28	WAT	98-82-8	
Bromoform	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	75-25-2	

X-Elevated reporting limit due to matrix interference

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.06 (continued)

Sample Tag: SB-25-12(11'-12')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	96-18-4	
n-Propylbenzene	200	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 14:28	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 14:28	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	500	SW8260B/5035	07/31/12 14:28	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 14:28	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	510	SW8260B/5035	07/31/12 14:28	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	510	SW8260B/5035	07/31/12 14:28	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	510	SW8260B/5035	07/31/12 14:28	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	510	SW8260B/5035	07/31/12 14:28	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.07
Sample Tag: SB/MW-14-12(6.5'-7')
Collected Date/Time: 07/17/2012 10:20
Matrix: Soil
COC Reference: 67835

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	86	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	1,260	mg/kg	2.1	SW6020	07/31/12 13:32	SLS	7429-90-5	
Arsenic	1.14	mg/kg	0.10	SW6020	07/30/12 18:05	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 18:05	SLS	7440-43-9	
Chromium	2.52	mg/kg	0.50	SW6020	07/30/12 18:05	SLS	7440-47-3	
Cobalt	1.97	mg/kg	0.50	SW6020	07/30/12 18:05	SLS	7440-48-4	
Copper	2.04	mg/kg	1.0	SW6020	07/30/12 18:05	SLS	7440-50-8	
Iron	2,230	mg/kg	5.4	SW6020	07/31/12 13:32	SLS	7439-89-6	
Manganese	220	mg/kg	0.50	SW6020	07/30/12 18:05	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 13:35	JRT	7439-97-6	
Vanadium	3.77	mg/kg	0.50	SW6020	07/30/12 18:05	SLS	7440-62-2	
Zinc	7.87	mg/kg	1.0	SW6020	07/30/12 18:05	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 15:31	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.07 (continued)

Sample Tag: SB/MW-14-12(6.5'-7')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 15:31	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 15:31	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 15:31	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 15:31	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 15:31	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 15:31	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 15:31	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 15:31	PL	88-06-2	
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	500	SW8260B/5035	07/31/12 14:48	WAT	60-29-7	
Acetone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 14:48	WAT	67-64-1	



Analytical Laboratory Report

Lab Sample ID: S53286.07 (continued)

Sample Tag: SB/MW-14-12(6.5'-7')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Methyl iodide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	700	SW8260B/5035	07/31/12 14:48	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	500	SW8260B/5035	07/31/12 14:48	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	2,000	SW8260B/5035	07/31/12 14:48	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	700	SW8260B/5035	07/31/12 14:48	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	700	SW8260B/5035	07/31/12 14:48	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	500	SW8260B/5035	07/31/12 14:48	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	700	SW8260B/5035	07/31/12 14:48	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 14:48	WAT	109-99-9	
Chloroform	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	7,000	SW8260B/5035	07/31/12 14:48	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	7,000	SW8260B/5035	07/31/12 14:48	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	56-23-5	
Benzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	700	SW8260B/5035	07/31/12 14:48	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	10061-01-5	
Toluene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	50	SW8260B/5035	07/31/12 14:48	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT		
o-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	95-47-6	
Styrene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	700	SW8260B/5035	07/31/12 14:48	WAT	98-82-8	
Bromoform	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	103-65-1	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.07 (continued)

Sample Tag: SB/MW-14-12(6.5'-7')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Bromobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 14:48	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 14:48	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	800	SW8260B/5035	07/31/12 14:48	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	700	SW8260B/5035	07/31/12 14:48	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	880	SW8260B/5035	07/31/12 14:48	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	880	SW8260B/5035	07/31/12 14:48	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	880	SW8260B/5035	07/31/12 14:48	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	880	SW8260B/5035	07/31/12 14:48	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.08
Sample Tag: SB-21-12 (0'-2')
Collected Date/Time: 07/17/2012 11:00
Matrix: Soil
COC Reference: 67835

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		
PNA Extraction	Completed			3550B	07/27/12 11:00	CCM		

Inorganics

Total Solids	77	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	1,910	mg/kg	2.3	SW6020	07/31/12 13:35	SLS	7429-90-5	
Arsenic	1.27	mg/kg	0.10	SW6020	07/30/12 18:08	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 18:08	SLS	7440-43-9	
Chromium	2.73	mg/kg	0.50	SW6020	07/30/12 18:08	SLS	7440-47-3	
Cobalt	3.44	mg/kg	0.50	SW6020	07/30/12 18:08	SLS	7440-48-4	
Copper	2.68	mg/kg	1.0	SW6020	07/30/12 18:08	SLS	7440-50-8	
Iron	2,980	mg/kg	5.8	SW6020	07/31/12 13:35	SLS	7439-89-6	
Manganese	315	mg/kg	0.50	SW6020	07/30/12 18:08	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 13:37	JRT	7439-97-6	
Vanadium	5.35	mg/kg	0.50	SW6020	07/30/12 18:08	SLS	7440-62-2	
Zinc	8.03	mg/kg	1.0	SW6020	07/30/12 18:08	SLS	7440-66-6	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 13:55	PL	90-12-0	



Analytical Laboratory Report

Lab Sample ID: S53286.08 (continued)

Sample Tag: SB-21-12 (0'-2')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	900	SW8260B/5035	07/31/12 15:09	WAT	60-29-7	
Acetone	Not detected	ug/kg	5,000	SW8260B/5035	07/31/12 15:09	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 15:09	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	900	SW8260B/5035	07/31/12 15:09	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	3,400	SW8260B/5035	07/31/12 15:09	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 15:09	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 15:09	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	900	SW8260B/5035	07/31/12 15:09	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 15:09	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	5,000	SW8260B/5035	07/31/12 15:09	WAT	109-99-9	
Chloroform	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	10,000	SW8260B/5035	07/31/12 15:09	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	10,000	SW8260B/5035	07/31/12 15:09	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	56-23-5	
Benzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 15:09	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	10061-01-5	
Toluene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	90	SW8260B/5035	07/31/12 15:09	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT		
o-Xylene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	95-47-6	
Styrene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 15:09	WAT	98-82-8	
Bromoform	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	79-34-5	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.08 (continued)

Sample Tag: SB-21-12 (0'-2')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,2,3-Trichloropropane	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 15:09	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:09	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 15:09	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 15:09	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	1,500	SW8260B/5035	07/31/12 15:09	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	1,500	SW8260B/5035	07/31/12 15:09	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	1,500	SW8260B/5035	07/31/12 15:09	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	1,500	SW8260B/5035	07/31/12 15:09	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.09

Sample Tag: SB-21-12 (6'-6.5')

Collected Date/Time: 07/17/2012 11:05

Matrix: Soil

COC Reference: 67835

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Other / Misc.

Hold until notified	Completed				07/26/12 08:17	PCS		



Analytical Laboratory Report

Lab Sample ID: S53286.10

Sample Tag: SB/MW-13-12 (0.5'-1.5')

Collected Date/Time: 07/17/2012 11:30

Matrix: Soil

COC Reference: 67835

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	87	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	2,310	mg/kg	2.1	SW6020	07/31/12 13:38	SLS	7429-90-5	
Arsenic	1.58	mg/kg	0.10	SW6020	07/30/12 18:11	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 18:11	SLS	7440-43-9	
Chromium	2.68	mg/kg	0.50	SW6020	07/30/12 18:11	SLS	7440-47-3	
Cobalt	3.14	mg/kg	0.50	SW6020	07/30/12 18:11	SLS	7440-48-4	
Copper	5.81	mg/kg	1.0	SW6020	07/30/12 18:11	SLS	7440-50-8	
Iron	7,190	mg/kg	5.4	SW6020	07/31/12 13:38	SLS	7439-89-6	
Manganese	297	mg/kg	0.50	SW6020	07/30/12 18:11	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 13:39	JRT	7439-97-6	
Vanadium	6.31	mg/kg	0.50	SW6020	07/30/12 18:11	SLS	7440-62-2	
Zinc	22.1	mg/kg	1.0	SW6020	07/30/12 18:11	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 22:56	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.10 (continued)

Sample Tag: SB/MW-13-12 (0.5'-1.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 22:56	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 22:56	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 22:56	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 22:56	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 22:56	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 22:56	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 22:56	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:56	PL	88-06-2	
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	700	SW8260B/5035	07/31/12 15:29	WAT	60-29-7	
Acetone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 15:29	WAT	67-64-1	



Analytical Laboratory Report

Lab Sample ID: S53286.10 (continued)

Sample Tag: SB/MW-13-12 (0.5'-1.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Methyl iodide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	900	SW8260B/5035	07/31/12 15:29	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	700	SW8260B/5035	07/31/12 15:29	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	2,600	SW8260B/5035	07/31/12 15:29	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	900	SW8260B/5035	07/31/12 15:29	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	900	SW8260B/5035	07/31/12 15:29	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	700	SW8260B/5035	07/31/12 15:29	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	900	SW8260B/5035	07/31/12 15:29	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 15:29	WAT	109-99-9	
Chloroform	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	9,000	SW8260B/5035	07/31/12 15:29	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	9,000	SW8260B/5035	07/31/12 15:29	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	56-23-5	
Benzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	900	SW8260B/5035	07/31/12 15:29	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	10061-01-5	
Toluene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 15:29	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT		
o-Xylene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	95-47-6	
Styrene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	900	SW8260B/5035	07/31/12 15:29	WAT	98-82-8	
Bromoform	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	103-65-1	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.10 (continued)

Sample Tag: SB/MW-13-12 (0.5'-1.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Bromobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:29	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:29	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 15:29	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	900	SW8260B/5035	07/31/12 15:29	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	1,100	SW8260B/5035	07/31/12 15:29	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	1,100	SW8260B/5035	07/31/12 15:29	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	1,100	SW8260B/5035	07/31/12 15:29	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	1,100	SW8260B/5035	07/31/12 15:29	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.11
Sample Tag: Duplicate 2
Collected Date/Time: 07/17/2012 00:01
Matrix: Soil
COC Reference: 67835

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	92	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	1,870	mg/kg	2	SW6020	07/31/12 13:41	SLS	7429-90-5	
Arsenic	2.40	mg/kg	0.10	SW6020	07/30/12 18:15	SLS	7440-38-2	
Cadmium	0.28	mg/kg	0.20	SW6020	07/30/12 18:15	SLS	7440-43-9	
Chromium	3.25	mg/kg	0.50	SW6020	07/30/12 18:15	SLS	7440-47-3	
Cobalt	2.20	mg/kg	0.50	SW6020	07/30/12 18:15	SLS	7440-48-4	
Copper	6.77	mg/kg	1.0	SW6020	07/30/12 18:15	SLS	7440-50-8	
Iron	3,380	mg/kg	5	SW6020	07/31/12 13:41	SLS	7439-89-6	
Manganese	271	mg/kg	0.50	SW6020	07/30/12 18:15	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 13:53	JRT	7439-97-6	
Vanadium	5.59	mg/kg	0.50	SW6020	07/30/12 18:15	SLS	7440-62-2	
Zinc	33.1	mg/kg	1.0	SW6020	07/30/12 18:15	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	120-12-7	
Benzo(a)anthracene	344	ug/kg	330	SW8270C	08/01/12 21:47	PL	56-55-3	
Benzo(b)fluoranthene	1,587	ug/kg	330	SW8270C	08/01/12 21:47	PL	205-99-2	p
Benzo(k)fluoranthene	1,583	ug/kg	330	SW8270C	08/01/12 21:47	PL	207-08-9	p
Benzo(ghi)perylene	612	ug/kg	330	SW8270C	08/01/12 21:47	PL	191-24-2	
Benzo(a)pyrene	1,152	ug/kg	330	SW8270C	08/01/12 21:47	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 21:47	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	7005-72-3	

p-Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.



Analytical Laboratory Report

Lab Sample ID: S53286.11 (continued)

Sample Tag: Duplicate 2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Chrysene	435	ug/kg	330	SW8270C	08/01/12 21:47	PL	218-01-9	
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 21:47	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 21:47	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 21:47	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	117-84-0	
Fluoranthene	493	ug/kg	330	SW8270C	08/01/12 21:47	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	525	ug/kg	330	SW8270C	08/01/12 21:47	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 21:47	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 21:47	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 21:47	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 21:47	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	108-95-2	
Pyrene	540	ug/kg	330	SW8270C	08/01/12 21:47	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:47	PL	88-06-2	

Organics - Volatiles

Volatile Organics 5035

Diethyl ether	Not detected	ug/kg	700	SW8260B/5035	07/31/12 15:49	WAT	60-29-7	



Analytical Laboratory Report

Lab Sample ID: S53286.11 (continued)

Sample Tag: Duplicate 2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Acetone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 15:49	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	800	SW8260B/5035	07/31/12 15:49	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	700	SW8260B/5035	07/31/12 15:49	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	2,500	SW8260B/5035	07/31/12 15:49	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	800	SW8260B/5035	07/31/12 15:49	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	800	SW8260B/5035	07/31/12 15:49	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	700	SW8260B/5035	07/31/12 15:49	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	800	SW8260B/5035	07/31/12 15:49	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 15:49	WAT	109-99-9	
Chloroform	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	8,000	SW8260B/5035	07/31/12 15:49	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	8,000	SW8260B/5035	07/31/12 15:49	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	56-23-5	
Benzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	800	SW8260B/5035	07/31/12 15:49	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	10061-01-5	
Toluene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 15:49	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT		
o-Xylene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	95-47-6	
Styrene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	800	SW8260B/5035	07/31/12 15:49	WAT	98-82-8	
Bromoform	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	96-18-4	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.11 (continued)

Sample Tag: Duplicate 2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
n-Propylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:49	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 15:49	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 15:49	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	800	SW8260B/5035	07/31/12 15:49	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	1,100	SW8260B/5035	07/31/12 15:49	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	1,100	SW8260B/5035	07/31/12 15:49	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	1,100	SW8260B/5035	07/31/12 15:49	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	1,100	SW8260B/5035	07/31/12 15:49	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.12
Sample Tag: SB-23-12(1.5'-2.5')
Collected Date/Time: 07/17/2012 12:30
Matrix: Soil
COC Reference: 67835

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		
PNA Extraction	Completed			3550B	07/27/12 11:00	CCM		

Inorganics

Total Solids	77	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	1,470	mg/kg	2.3	SW6020	07/31/12 13:50	SLS	7429-90-5	
Arsenic	1.68	mg/kg	0.10	SW6020	07/30/12 18:25	SLS	7440-38-2	
Cadmium	0.59	mg/kg	0.20	SW6020	07/30/12 18:25	SLS	7440-43-9	
Chromium	10.6	mg/kg	0.50	SW6020	07/30/12 18:25	SLS	7440-47-3	
Cobalt	1.71	mg/kg	0.50	SW6020	07/30/12 18:25	SLS	7440-48-4	
Copper	22.6	mg/kg	1.0	SW6020	07/30/12 18:25	SLS	7440-50-8	
Iron	6,540	mg/kg	5.8	SW6020	07/31/12 13:50	SLS	7439-89-6	
Manganese	378	mg/kg	0.50	SW6020	07/30/12 18:25	SLS	7439-96-5	
Mercury	0.162	mg/kg	0.050	SW7471A	07/27/12 13:55	JRT	7439-97-6	
Vanadium	3.89	mg/kg	0.50	SW6020	07/30/12 18:25	SLS	7440-62-2	
Zinc	94.6	mg/kg	1.0	SW6020	07/30/12 18:25	SLS	7440-66-6	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 18:27	PL	90-12-0	



Analytical Laboratory Report

Lab Sample ID: S53286.12 (continued)

Sample Tag: SB-23-12(1.5'-2.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	800	SW8260B/5035	07/31/12 16:09	WAT	60-29-7	
Acetone	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 16:09	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:09	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	800	SW8260B/5035	07/31/12 16:09	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	2,900	SW8260B/5035	07/31/12 16:09	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:09	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:09	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	800	SW8260B/5035	07/31/12 16:09	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:09	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 16:09	WAT	109-99-9	
Chloroform	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	10,000	SW8260B/5035	07/31/12 16:09	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	10,000	SW8260B/5035	07/31/12 16:09	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	56-23-5	
Benzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:09	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	10061-01-5	
Toluene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 16:09	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT		
o-Xylene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	95-47-6	
Styrene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:09	WAT	98-82-8	
Bromoform	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	79-34-5	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.12 (continued)

Sample Tag: SB-23-12(1.5'-2.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,2,3-Trichloropropane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:09	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:09	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:09	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:09	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	1,300	SW8260B/5035	07/31/12 16:09	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	1,300	SW8260B/5035	07/31/12 16:09	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	1,300	SW8260B/5035	07/31/12 16:09	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	1,300	SW8260B/5035	07/31/12 16:09	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.13
Sample Tag: SB/MW-12-12(8.5'-9.5')
Collected Date/Time: 07/17/2012 13:00
Matrix: Soil
COC Reference: 67836

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	70	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	3,040	mg/kg	2.6	SW6020	07/31/12 13:53	SLS	7429-90-5	
Arsenic	2.16	mg/kg	0.10	SW6020	07/30/12 18:29	SLS	7440-38-2	
Cadmium	0.29	mg/kg	0.20	SW6020	07/30/12 18:29	SLS	7440-43-9	
Chromium	4.17	mg/kg	0.50	SW6020	07/30/12 18:29	SLS	7440-47-3	
Cobalt	2.40	mg/kg	0.50	SW6020	07/30/12 18:29	SLS	7440-48-4	
Copper	9.79	mg/kg	1.0	SW6020	07/30/12 18:29	SLS	7440-50-8	
Iron	5,960	mg/kg	6.6	SW6020	07/31/12 13:53	SLS	7439-89-6	
Manganese	247	mg/kg	0.50	SW6020	07/30/12 18:29	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 13:58	JRT	7439-97-6	
Vanadium	10.4	mg/kg	0.50	SW6020	07/30/12 18:29	SLS	7440-62-2	
Zinc	21.6	mg/kg	1.0	SW6020	07/30/12 18:29	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 16:05	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.13 (continued)

Sample Tag: SB/MW-12-12(8.5'-9.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 16:05	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	105-67-9	
Dimethyl phthalate	451	ug/kg	330	SW8270C	08/01/12 16:05	PL	131-11-3	B
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 16:05	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 16:05	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 16:05	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 16:05	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 16:05	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 16:05	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:05	PL	88-06-2	

Organics - Volatiles

Volatile Organics 5035

Diethyl ether	Not detected	ug/kg	800	SW8260B/5035	07/31/12 16:29	WAT	60-29-7	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S53286.13 (continued)

Sample Tag: SB/MW-12-12(8.5'-9.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Acetone	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 16:29	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:29	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	800	SW8260B/5035	07/31/12 16:29	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	2,900	SW8260B/5035	07/31/12 16:29	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:29	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:29	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	800	SW8260B/5035	07/31/12 16:29	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:29	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 16:29	WAT	109-99-9	
Chloroform	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	10,000	SW8260B/5035	07/31/12 16:29	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	10,000	SW8260B/5035	07/31/12 16:29	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	56-23-5	
Benzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:29	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	10061-01-5	
Toluene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 16:29	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT		
o-Xylene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	95-47-6	
Styrene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:29	WAT	98-82-8	
Bromoform	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	96-18-4	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.13 (continued)

Sample Tag: SB/MW-12-12(8.5'-9.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
n-Propylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:29	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:29	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:29	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:29	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	1,300	SW8260B/5035	07/31/12 16:29	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	1,300	SW8260B/5035	07/31/12 16:29	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	1,300	SW8260B/5035	07/31/12 16:29	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	1,300	SW8260B/5035	07/31/12 16:29	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.14
Sample Tag: SB-22-12(2'-3')
Collected Date/Time: 07/17/2012 14:00
Matrix: Soil
COC Reference: 67836

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		
PNA Extraction	Completed			3550B	07/27/12 11:00	CCM		

Inorganics

Total Solids	88	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	2,190	mg/kg	2	SW6020	07/31/12 13:56	SLS	7429-90-5	
Arsenic	1.83	mg/kg	0.10	SW6020	07/30/12 18:32	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 18:32	SLS	7440-43-9	
Chromium	2.76	mg/kg	0.50	SW6020	07/30/12 18:32	SLS	7440-47-3	
Cobalt	4.10	mg/kg	0.50	SW6020	07/30/12 18:32	SLS	7440-48-4	
Copper	2.34	mg/kg	1.0	SW6020	07/30/12 18:32	SLS	7440-50-8	
Iron	3,540	mg/kg	5.2	SW6020	07/31/12 13:56	SLS	7439-89-6	
Manganese	331	mg/kg	0.50	SW6020	07/30/12 18:32	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:00	JRT	7439-97-6	
Vanadium	6.55	mg/kg	0.50	SW6020	07/30/12 18:32	SLS	7440-62-2	
Zinc	9.52	mg/kg	1.0	SW6020	07/30/12 18:32	SLS	7440-66-6	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 14:18	PL	90-12-0	



Analytical Laboratory Report

Lab Sample ID: S53286.14 (continued)

Sample Tag: SB-22-12(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	700	SW8260B/5035	07/31/12 16:50	WAT	60-29-7	
Acetone	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 16:50	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	900	SW8260B/5035	07/31/12 16:50	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	700	SW8260B/5035	07/31/12 16:50	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	2,800	SW8260B/5035	07/31/12 16:50	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	900	SW8260B/5035	07/31/12 16:50	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	900	SW8260B/5035	07/31/12 16:50	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	700	SW8260B/5035	07/31/12 16:50	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	900	SW8260B/5035	07/31/12 16:50	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 16:50	WAT	109-99-9	
Chloroform	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	9,000	SW8260B/5035	07/31/12 16:50	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	9,000	SW8260B/5035	07/31/12 16:50	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	56-23-5	
Benzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	900	SW8260B/5035	07/31/12 16:50	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	10061-01-5	
Toluene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:50	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT		
o-Xylene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	95-47-6	
Styrene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	900	SW8260B/5035	07/31/12 16:50	WAT	98-82-8	
Bromoform	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	79-34-5	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.14 (continued)

Sample Tag: SB-22-12(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,2,3-Trichloropropane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:50	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:50	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:50	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	900	SW8260B/5035	07/31/12 16:50	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	1,200	SW8260B/5035	07/31/12 16:50	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	1,200	SW8260B/5035	07/31/12 16:50	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	1,200	SW8260B/5035	07/31/12 16:50	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	1,200	SW8260B/5035	07/31/12 16:50	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.15
Sample Tag: SB/MW-6-12(14'-15')
Collected Date/Time: 07/17/2012 17:00
Matrix: Soil
COC Reference: 67836

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	81	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	2,330	mg/kg	2.2	SW6020	07/31/12 13:59	SLS	7429-90-5	
Arsenic	1.68	mg/kg	0.10	SW6020	07/30/12 18:35	SLS	7440-38-2	
Cadmium	0.26	mg/kg	0.20	SW6020	07/30/12 18:35	SLS	7440-43-9	
Chromium	3.30	mg/kg	0.50	SW6020	07/30/12 18:35	SLS	7440-47-3	
Cobalt	2.63	mg/kg	0.50	SW6020	07/30/12 18:35	SLS	7440-48-4	
Copper	9.55	mg/kg	1.0	SW6020	07/30/12 18:35	SLS	7440-50-8	
Iron	3,930	mg/kg	5.6	SW6020	07/31/12 13:59	SLS	7439-89-6	
Manganese	115	mg/kg	0.50	SW6020	07/30/12 18:35	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:02	JRT	7439-97-6	
Vanadium	9.22	mg/kg	0.50	SW6020	07/30/12 18:35	SLS	7440-62-2	
Zinc	17.0	mg/kg	1.0	SW6020	07/30/12 18:35	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 16:39	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.15 (continued)

Sample Tag: SB/MW-6-12(14'-15')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 16:39	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	105-67-9	
Dimethyl phthalate	346	ug/kg	330	SW8270C	08/01/12 16:39	PL	131-11-3	B
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 16:39	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 16:39	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 16:39	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 16:39	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 16:39	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 16:39	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 16:39	PL	88-06-2	

Organics - Volatiles

Volatile Organics 5035

Diethyl ether	Not detected	ug/kg	500	SW8260B/5035	07/31/12 17:10	WAT	60-29-7	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S53286.15 (continued)

Sample Tag: SB/MW-6-12(14'-15')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Acetone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 17:10	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	700	SW8260B/5035	07/31/12 17:10	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	500	SW8260B/5035	07/31/12 17:10	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	2,000	SW8260B/5035	07/31/12 17:10	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	700	SW8260B/5035	07/31/12 17:10	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	700	SW8260B/5035	07/31/12 17:10	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	500	SW8260B/5035	07/31/12 17:10	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	700	SW8260B/5035	07/31/12 17:10	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 17:10	WAT	109-99-9	
Chloroform	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	7,000	SW8260B/5035	07/31/12 17:10	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	7,000	SW8260B/5035	07/31/12 17:10	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	56-23-5	
Benzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	700	SW8260B/5035	07/31/12 17:10	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	10061-01-5	
Toluene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	50	SW8260B/5035	07/31/12 17:10	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT		
o-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	95-47-6	
Styrene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	700	SW8260B/5035	07/31/12 17:10	WAT	98-82-8	
Bromoform	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	96-18-4	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.15 (continued)

Sample Tag: SB/MW-6-12(14'-15')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
n-Propylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:10	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:10	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	800	SW8260B/5035	07/31/12 17:10	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	700	SW8260B/5035	07/31/12 17:10	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	880	SW8260B/5035	07/31/12 17:10	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	880	SW8260B/5035	07/31/12 17:10	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	880	SW8260B/5035	07/31/12 17:10	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	880	SW8260B/5035	07/31/12 17:10	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.16
Sample Tag: SB/MW-10(2'-3')
Collected Date/Time: 07/18/2012 10:48
Matrix: Soil
COC Reference: 67836

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	81	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	3,360	mg/kg	4.5	SW6020	07/31/12 14:02	SLS	7429-90-5	
Arsenic	4.97	mg/kg	0.10	SW6020	07/30/12 18:39	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 18:39	SLS	7440-43-9	
Chromium	5.07	mg/kg	0.50	SW6020	07/30/12 18:39	SLS	7440-47-3	
Cobalt	3.27	mg/kg	0.50	SW6020	07/30/12 18:39	SLS	7440-48-4	
Copper	7.08	mg/kg	1.0	SW6020	07/30/12 18:39	SLS	7440-50-8	
Iron	18,800	mg/kg	11	SW6020	07/31/12 14:02	SLS	7439-89-6	
Manganese	268	mg/kg	0.50	SW6020	07/30/12 18:39	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:04	JRT	7439-97-6	
Vanadium	10.6	mg/kg	0.50	SW6020	07/30/12 18:39	SLS	7440-62-2	
Zinc	22.3	mg/kg	1.0	SW6020	07/30/12 18:39	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 17:13	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.16 (continued)

Sample Tag: SB/MW-10(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 17:13	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 17:13	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 17:13	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 17:13	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 17:13	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 17:13	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 17:13	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:13	PL	88-06-2	
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:51	WAT	60-29-7	
Acetone	Not detected	ug/kg	2,000	SW8260B/5035	07/31/12 17:51	WAT	67-64-1	



Analytical Laboratory Report

Lab Sample ID: S53286.16 (continued)

Sample Tag: SB/MW-10(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Methyl iodide	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	400	SW8260B/5035	07/31/12 17:51	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:51	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	1,100	SW8260B/5035	07/31/12 17:51	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 17:51	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 17:51	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:51	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 17:51	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	2,000	SW8260B/5035	07/31/12 17:51	WAT	109-99-9	
Chloroform	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 17:51	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 17:51	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	56-23-5	
Benzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 17:51	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	10061-01-5	
Toluene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/31/12 17:51	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT		
o-Xylene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	95-47-6	
Styrene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 17:51	WAT	98-82-8	
Bromoform	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	103-65-1	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.16 (continued)

Sample Tag: SB/MW-10(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Bromobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:51	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 17:51	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	500	SW8260B/5035	07/31/12 17:51	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 17:51	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 17:51	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 17:51	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 17:51	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 17:51	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.17
Sample Tag: SB/MW-9(6'-8')
Collected Date/Time: 07/18/2012 11:42
Matrix: Soil
COC Reference: 67836

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	83	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	2,680	mg/kg	2.3	SW6020	07/31/12 14:05	SLS	7429-90-5	
Arsenic	7.24	mg/kg	0.10	SW6020	07/30/12 18:42	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 18:42	SLS	7440-43-9	
Chromium	5.94	mg/kg	0.50	SW6020	07/30/12 18:42	SLS	7440-47-3	
Cobalt	4.99	mg/kg	0.50	SW6020	07/30/12 18:42	SLS	7440-48-4	
Copper	14.3	mg/kg	1.0	SW6020	07/30/12 18:42	SLS	7440-50-8	
Iron	10,000	mg/kg	5.7	SW6020	07/31/12 14:05	SLS	7439-89-6	
Manganese	333	mg/kg	0.50	SW6020	07/30/12 18:42	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:07	JRT	7439-97-6	
Vanadium	11.1	mg/kg	0.50	SW6020	07/30/12 18:42	SLS	7440-62-2	
Zinc	19.1	mg/kg	1.0	SW6020	07/30/12 18:42	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 17:47	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.17 (continued)

Sample Tag: SB/MW-9(6'-8')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 17:47	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 17:47	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 17:47	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 17:47	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 17:47	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 17:47	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 17:47	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 17:47	PL	88-06-2	
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:11	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 18:11	WAT	67-64-1	



Analytical Laboratory Report

Lab Sample ID: S53286.17 (continued)

Sample Tag: SB/MW-9(6'-8')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:11	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:11	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	1,100	SW8260B/5035	07/31/12 18:11	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:11	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:11	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:11	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:11	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 18:11	WAT	109-99-9	
Chloroform	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 18:11	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 18:11	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	56-23-5	
Benzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:11	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/31/12 18:11	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT		
o-Xylene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	95-47-6	
Styrene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:11	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	103-65-1	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.17 (continued)

Sample Tag: SB/MW-9(6'-8')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:11	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:11	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:11	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:11	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	470	SW8260B/5035	07/31/12 18:11	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	470	SW8260B/5035	07/31/12 18:11	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	470	SW8260B/5035	07/31/12 18:11	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	470	SW8260B/5035	07/31/12 18:11	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.18
Sample Tag: SB/MW-8(5'-6')
Collected Date/Time: 07/18/2012 12:43
Matrix: Soil
COC Reference: 67836

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	86	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	3,640	mg/kg	2.2	SW6020	07/31/12 14:08	SLS	7429-90-5	
Arsenic	2.31	mg/kg	0.10	SW6020	07/30/12 18:45	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 18:45	SLS	7440-43-9	
Chromium	5.14	mg/kg	0.50	SW6020	07/30/12 18:45	SLS	7440-47-3	
Cobalt	3.78	mg/kg	0.50	SW6020	07/30/12 18:45	SLS	7440-48-4	
Copper	5.29	mg/kg	1.0	SW6020	07/30/12 18:45	SLS	7440-50-8	
Iron	5,350	mg/kg	5.4	SW6020	07/31/12 14:08	SLS	7439-89-6	
Manganese	232	mg/kg	0.50	SW6020	07/30/12 18:45	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:09	JRT	7439-97-6	
Vanadium	12.0	mg/kg	0.50	SW6020	07/30/12 18:45	SLS	7440-62-2	
Zinc	14.2	mg/kg	1.0	SW6020	07/30/12 18:45	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 18:22	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.18 (continued)

Sample Tag: SB/MW-8(5'-6')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 18:22	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 18:22	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 18:22	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 18:22	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 18:22	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 18:22	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 18:22	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:22	PL	88-06-2	
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:32	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 18:32	WAT	67-64-1	



Analytical Laboratory Report

Lab Sample ID: S53286.18 (continued)

Sample Tag: SB/MW-8(5'-6')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:32	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:32	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	980	SW8260B/5035	07/31/12 18:32	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:32	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:32	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:32	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:32	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 18:32	WAT	109-99-9	
Chloroform	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 18:32	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 18:32	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	56-23-5	
Benzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:32	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/31/12 18:32	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT		
o-Xylene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	95-47-6	
Styrene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:32	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	103-65-1	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.18 (continued)

Sample Tag: SB/MW-8(5'-6')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:32	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:32	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:32	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:32	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	430	SW8260B/5035	07/31/12 18:32	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	430	SW8260B/5035	07/31/12 18:32	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	430	SW8260B/5035	07/31/12 18:32	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	430	SW8260B/5035	07/31/12 18:32	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.19
Sample Tag: SB/MW-7(2'-3')
Collected Date/Time: 07/19/2012 10:30
Matrix: Soil
COC Reference: 67836

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Other / Misc.								
Hold until notified	Completed				07/26/12 08:17	PCS		



Analytical Laboratory Report

Lab Sample ID: S53286.20
Sample Tag: SB/MW-7(4'-5')
Collected Date/Time: 07/19/2012 10:34
Matrix: Soil
COC Reference: 67836

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	78	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	5,590	mg/kg	4.6	SW6020	07/31/12 14:11	SLS	7429-90-5	
Arsenic	0.68	mg/kg	0.10	SW6020	07/30/12 18:49	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 18:49	SLS	7440-43-9	
Chromium	5.18	mg/kg	0.50	SW6020	07/30/12 18:49	SLS	7440-47-3	
Cobalt	5.18	mg/kg	0.50	SW6020	07/30/12 18:49	SLS	7440-48-4	
Copper	10.2	mg/kg	1.0	SW6020	07/30/12 18:49	SLS	7440-50-8	
Iron	26,600	mg/kg	11	SW6020	07/31/12 14:11	SLS	7439-89-6	
Manganese	894	mg/kg	0.50	SW6020	07/30/12 18:49	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:11	JRT	7439-97-6	
Vanadium	11.2	mg/kg	0.50	SW6020	07/30/12 18:49	SLS	7440-62-2	
Zinc	25.4	mg/kg	1.0	SW6020	07/30/12 18:49	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 18:56	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.20 (continued)

Sample Tag: SB/MW-7(4'-5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 18:56	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 18:56	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 18:56	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 18:56	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 18:56	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 18:56	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 18:56	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 18:56	PL	88-06-2	
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:53	WAT	60-29-7	
Acetone	Not detected	ug/kg	2,000	SW8260B/5035	07/31/12 18:53	WAT	67-64-1	



Analytical Laboratory Report

Lab Sample ID: S53286.20 (continued)

Sample Tag: SB/MW-7(4'-5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Methyl iodide	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:53	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:53	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	1,200	SW8260B/5035	07/31/12 18:53	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:53	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:53	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:53	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:53	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	2,000	SW8260B/5035	07/31/12 18:53	WAT	109-99-9	
Chloroform	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 18:53	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 18:53	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	56-23-5	
Benzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:53	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	10061-01-5	
Toluene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/31/12 18:53	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT		
o-Xylene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	95-47-6	
Styrene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:53	WAT	98-82-8	
Bromoform	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	103-65-1	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.20 (continued)

Sample Tag: SB/MW-7(4'-5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Bromobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:53	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 18:53	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	500	SW8260B/5035	07/31/12 18:53	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:53	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	520	SW8260B/5035	07/31/12 18:53	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	520	SW8260B/5035	07/31/12 18:53	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	520	SW8260B/5035	07/31/12 18:53	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	520	SW8260B/5035	07/31/12 18:53	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.21
Sample Tag: SB/MW-4-12(2'-3')
Collected Date/Time: 07/19/2012 11:33
Matrix: Soil
COC Reference: 67836

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	84	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	1,740	mg/kg	2.2	SW6020	07/31/12 14:14	SLS	7429-90-5	
Arsenic	7.09	mg/kg	0.10	SW6020	07/30/12 18:52	SLS	7440-38-2	
Cadmium	0.25	mg/kg	0.20	SW6020	07/30/12 18:52	SLS	7440-43-9	
Chromium	3.76	mg/kg	0.50	SW6020	07/30/12 18:52	SLS	7440-47-3	
Cobalt	2.80	mg/kg	0.50	SW6020	07/30/12 18:52	SLS	7440-48-4	
Copper	9.13	mg/kg	1.0	SW6020	07/30/12 18:52	SLS	7440-50-8	
Iron	2,700	mg/kg	5.5	SW6020	07/31/12 14:14	SLS	7439-89-6	
Manganese	215	mg/kg	0.50	SW6020	07/30/12 18:52	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 13:42	JRT	7439-97-6	
Vanadium	9.62	mg/kg	0.50	SW6020	07/30/12 18:52	SLS	7440-62-2	
Zinc	15.5	mg/kg	1.0	SW6020	07/30/12 18:52	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 19:30	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.21 (continued)

Sample Tag: SB/MW-4-12(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 19:30	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 19:30	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 19:30	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 19:30	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 19:30	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 19:30	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 19:30	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 19:30	PL	88-06-2	
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:12	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 19:12	WAT	67-64-1	



Analytical Laboratory Report

Lab Sample ID: S53286.21 (continued)

Sample Tag: SB/MW-4-12(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:12	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:12	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 19:12	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:12	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:12	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:12	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:12	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 19:12	WAT	109-99-9	
Chloroform	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 19:12	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 19:12	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	56-23-5	
Benzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:12	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/31/12 19:12	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT		
o-Xylene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	95-47-6	
Styrene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:12	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	103-65-1	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.21 (continued)

Sample Tag: SB/MW-4-12(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 19:12	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 19:12	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 19:12	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:12	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	460	SW8260B/5035	07/31/12 19:12	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	460	SW8260B/5035	07/31/12 19:12	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	460	SW8260B/5035	07/31/12 19:12	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	460	SW8260B/5035	07/31/12 19:12	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.22
Sample Tag: SB/MW-4-12(2'-3') DUP
Collected Date/Time: 07/19/2012 11:33
Matrix: Soil
COC Reference: 67836

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 09:00	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	80	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	2,550	mg/kg	2.3	SW6020	07/31/12 14:17	SLS	7429-90-5	
Arsenic	11.8	mg/kg	0.10	SW6020	07/30/12 18:56	SLS	7440-38-2	
Cadmium	0.35	mg/kg	0.20	SW6020	07/30/12 18:56	SLS	7440-43-9	
Chromium	5.22	mg/kg	0.50	SW6020	07/30/12 18:56	SLS	7440-47-3	
Cobalt	4.39	mg/kg	0.50	SW6020	07/30/12 18:56	SLS	7440-48-4	
Copper	14.4	mg/kg	1.0	SW6020	07/30/12 18:56	SLS	7440-50-8	
Iron	4,010	mg/kg	5.8	SW6020	07/31/12 14:17	SLS	7439-89-6	
Manganese	245	mg/kg	0.50	SW6020	07/30/12 18:56	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 13:44	JRT	7439-97-6	
Vanadium	13.5	mg/kg	0.50	SW6020	07/30/12 18:56	SLS	7440-62-2	
Zinc	22.3	mg/kg	1.0	SW6020	07/30/12 18:56	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 20:04	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.22 (continued)

Sample Tag: SB/MW-4-12(2'-3') DUP

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 20:04	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 20:04	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 20:04	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 20:04	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 20:04	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 20:04	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 20:04	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:04	PL	88-06-2	
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:33	WAT	60-29-7	
Acetone	Not detected	ug/kg	2,000	SW8260B/5035	07/31/12 19:33	WAT	67-64-1	



Analytical Laboratory Report

Lab Sample ID: S53286.22 (continued)

Sample Tag: SB/MW-4-12(2'-3') DUP

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Methyl iodide	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	400	SW8260B/5035	07/31/12 19:33	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:33	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	1,100	SW8260B/5035	07/31/12 19:33	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 19:33	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 19:33	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:33	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 19:33	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	2,000	SW8260B/5035	07/31/12 19:33	WAT	109-99-9	
Chloroform	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 19:33	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 19:33	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	56-23-5	
Benzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 19:33	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	10061-01-5	
Toluene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/31/12 19:33	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT		
o-Xylene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	95-47-6	
Styrene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 19:33	WAT	98-82-8	
Bromoform	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	103-65-1	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.22 (continued)

Sample Tag: SB/MW-4-12(2'-3') DUP

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Bromobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:33	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:33	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	500	SW8260B/5035	07/31/12 19:33	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 19:33	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 19:33	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 19:33	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 19:33	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	500	SW8260B/5035	07/31/12 19:33	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.23
Sample Tag: SB-16-12(2'-3')
Collected Date/Time: 07/19/2012 14:50
Matrix: Soil
COC Reference: 67836

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Other / Misc.								
Hold until notified	Completed				07/26/12 08:17	PCS		



Analytical Laboratory Report

Lab Sample ID: S53286.24
Sample Tag: SB-16-12(5'-6')
Collected Date/Time: 07/19/2012 14:54
Matrix: Soil
COC Reference: 67836

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			SW7471A	07/27/12 11:45	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		
PNA Extraction	Completed			3550B	07/27/12 11:00	CCM		

Inorganics

Total Solids	77	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	4,150	mg/kg	4.8	SW6020	07/31/12 14:38	SLS	7429-90-5	
Arsenic	10.5	mg/kg	0.10	SW6020	07/30/12 19:24	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 19:24	SLS	7440-43-9	
Chromium	7.50	mg/kg	0.50	SW6020	07/30/12 19:24	SLS	7440-47-3	
Cobalt	10.6	mg/kg	0.50	SW6020	07/30/12 19:24	SLS	7440-48-4	
Copper	9.63	mg/kg	1.0	SW6020	07/30/12 19:24	SLS	7440-50-8	
Iron	13,000	mg/kg	12	SW6020	07/31/12 14:38	SLS	7439-89-6	
Manganese	1,780	mg/kg	0.50	SW6020	07/30/12 19:24	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:23	JRT	7439-97-6	
Vanadium	14.2	mg/kg	0.50	SW6020	07/30/12 19:24	SLS	7440-62-2	
Zinc	34.2	mg/kg	1.0	SW6020	07/30/12 19:24	SLS	7440-66-6	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 14:40	PL	90-12-0	



Analytical Laboratory Report

Lab Sample ID: S53286.24 (continued)

Sample Tag: SB-16-12(5'-6')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:53	WAT	60-29-7	
Acetone	Not detected	ug/kg	2,000	SW8260B/5035	07/31/12 19:53	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	400	SW8260B/5035	07/31/12 19:53	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:53	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	1,200	SW8260B/5035	07/31/12 19:53	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 19:53	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 19:53	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 19:53	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 19:53	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	2,000	SW8260B/5035	07/31/12 19:53	WAT	109-99-9	
Chloroform	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 19:53	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	4,000	SW8260B/5035	07/31/12 19:53	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	56-23-5	
Benzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 19:53	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	10061-01-5	
Toluene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/31/12 19:53	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT		
o-Xylene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	95-47-6	
Styrene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 19:53	WAT	98-82-8	
Bromoform	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	79-34-5	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.24 (continued)

Sample Tag: SB-16-12(5'-6')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,2,3-Trichloropropane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	200	SW8260B/5035	07/31/12 19:53	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	80	SW8260B/5035	07/31/12 19:53	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	500	SW8260B/5035	07/31/12 19:53	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 19:53	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	530	SW8260B/5035	07/31/12 19:53	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	530	SW8260B/5035	07/31/12 19:53	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	530	SW8260B/5035	07/31/12 19:53	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	530	SW8260B/5035	07/31/12 19:53	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.25
Sample Tag: SB-17-12(2'-2.5')
Collected Date/Time: 07/19/2012 15:50
Matrix: Soil
COC Reference: 67836

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			SW7471A	07/27/12 11:45	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		
PNA Extraction	Completed			3550B	07/27/12 11:00	CCM		

Inorganics

Total Solids	86	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	2,050	mg/kg	2.2	SW6020	07/31/12 14:41	SLS	7429-90-5	
Arsenic	11.9	mg/kg	0.10	SW6020	07/30/12 19:27	SLS	7440-38-2	
Cadmium	0.21	mg/kg	0.20	SW6020	07/30/12 19:27	SLS	7440-43-9	
Chromium	3.42	mg/kg	0.50	SW6020	07/30/12 19:27	SLS	7440-47-3	
Cobalt	4.13	mg/kg	0.50	SW6020	07/30/12 19:27	SLS	7440-48-4	
Copper	5.78	mg/kg	1.0	SW6020	07/30/12 19:27	SLS	7440-50-8	
Iron	4,890	mg/kg	5.4	SW6020	07/31/12 14:41	SLS	7439-89-6	
Manganese	343	mg/kg	0.50	SW6020	07/30/12 19:27	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:36	JRT	7439-97-6	
Vanadium	13.2	mg/kg	0.50	SW6020	07/30/12 19:27	SLS	7440-62-2	
Zinc	19.4	mg/kg	1.0	SW6020	07/30/12 19:27	SLS	7440-66-6	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 15:03	PL	90-12-0	



Analytical Laboratory Report

Lab Sample ID: S53286.25 (continued)

Sample Tag: SB-17-12(2'-2.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/31/12 20:13	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 20:13	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 20:13	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/31/12 20:13	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	990	SW8260B/5035	07/31/12 20:13	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 20:13	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 20:13	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 20:13	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 20:13	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 20:13	WAT	109-99-9	
Chloroform	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 20:13	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 20:13	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	56-23-5	
Benzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 20:13	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/31/12 20:13	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT		
o-Xylene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	95-47-6	
Styrene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 20:13	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	79-34-5	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.25 (continued)

Sample Tag: SB-17-12(2'-2.5')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 20:13	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 20:13	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 20:13	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 20:13	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	440	SW8260B/5035	07/31/12 20:13	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	440	SW8260B/5035	07/31/12 20:13	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	440	SW8260B/5035	07/31/12 20:13	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	440	SW8260B/5035	07/31/12 20:13	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.26

Sample Tag: SB/MW-11-12(2'-3')

Collected Date/Time: 07/19/2012 16:45

Matrix: Soil

COC Reference: 67837

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Other / Misc.

Hold until notified	Completed				07/26/12 08:17	PCS		



Analytical Laboratory Report

Lab Sample ID: S53286.27
Sample Tag: SB/MW-11-12(6'-7')
Collected Date/Time: 07/19/2012 16:50
Matrix: Soil
COC Reference: 67837

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 11:45	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	90	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	2,460	mg/kg	2	SW6020	07/31/12 14:44	SLS	7429-90-5	
Arsenic	3.01	mg/kg	0.10	SW6020	07/30/12 19:30	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 19:30	SLS	7440-43-9	
Chromium	3.34	mg/kg	0.50	SW6020	07/30/12 19:30	SLS	7440-47-3	
Cobalt	2.82	mg/kg	0.50	SW6020	07/30/12 19:30	SLS	7440-48-4	
Copper	4.04	mg/kg	1.0	SW6020	07/30/12 19:30	SLS	7440-50-8	
Iron	11,500	mg/kg	5	SW6020	07/31/12 14:44	SLS	7439-89-6	
Manganese	377	mg/kg	0.50	SW6020	07/30/12 19:30	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:39	JRT	7439-97-6	
Vanadium	5.93	mg/kg	0.50	SW6020	07/30/12 19:30	SLS	7440-62-2	
Zinc	17.9	mg/kg	1.0	SW6020	07/30/12 19:30	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 20:39	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.27 (continued)

Sample Tag: SB/MW-11-12(6'-7')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 20:39	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 20:39	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 20:39	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 20:39	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 20:39	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 20:39	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 20:39	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 20:39	PL	88-06-2	

Organics - Volatiles

Volatile Organics 5035

Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:33	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	08/01/12 04:33	WAT	67-64-1	



Analytical Laboratory Report

Lab Sample ID: S53286.27 (continued)

Sample Tag: SB/MW-11-12(6'-7')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:33	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:33	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	1,000	SW8260B/5035	08/01/12 04:33	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:33	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:33	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:33	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:33	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	08/01/12 04:33	WAT	109-99-9	
Chloroform	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	08/01/12 04:33	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	08/01/12 04:33	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	56-23-5	
Benzene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:33	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	08/01/12 04:33	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT		
o-Xylene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	95-47-6	
Styrene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:33	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	103-65-1	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.27 (continued)

Sample Tag: SB/MW-11-12(6'-7')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:33	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 04:33	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	08/01/12 04:33	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:33	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	460	SW8260B/5035	08/01/12 04:33	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	460	SW8260B/5035	08/01/12 04:33	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	460	SW8260B/5035	08/01/12 04:33	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	460	SW8260B/5035	08/01/12 04:33	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.28
Sample Tag: SB/MW-3-12(3'-4')
Collected Date/Time: 07/19/2012 17:36
Matrix: Soil
COC Reference: 67837

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 11:45	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	93	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	1,940	mg/kg	2	SW6020	07/31/12 14:47	SLS	7429-90-5	
Arsenic	4.70	mg/kg	0.10	SW6020	07/30/12 19:34	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 19:34	SLS	7440-43-9	
Chromium	3.28	mg/kg	0.50	SW6020	07/30/12 19:34	SLS	7440-47-3	
Cobalt	2.26	mg/kg	0.50	SW6020	07/30/12 19:34	SLS	7440-48-4	
Copper	9.24	mg/kg	1.0	SW6020	07/30/12 19:34	SLS	7440-50-8	
Iron	4,130	mg/kg	5	SW6020	07/31/12 14:47	SLS	7439-89-6	
Manganese	131	mg/kg	0.50	SW6020	07/30/12 19:34	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:41	JRT	7439-97-6	
Vanadium	7.48	mg/kg	0.50	SW6020	07/30/12 19:34	SLS	7440-62-2	
Zinc	21.8	mg/kg	1.0	SW6020	07/30/12 19:34	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/02/12 15:59	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.28 (continued)

Sample Tag: SB/MW-3-12(3'-4')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/02/12 15:59	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/02/12 15:59	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/02/12 15:59	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/02/12 15:59	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/02/12 15:59	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/02/12 15:59	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/02/12 15:59	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/02/12 15:59	PL	88-06-2	
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	200	SW8260B/5035	08/01/12 04:53	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	08/01/12 04:53	WAT	67-64-1	



Analytical Laboratory Report

Lab Sample ID: S53286.28 (continued)

Sample Tag: SB/MW-3-12(3'-4')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:53	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	200	SW8260B/5035	08/01/12 04:53	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	860	SW8260B/5035	08/01/12 04:53	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:53	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:53	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	200	SW8260B/5035	08/01/12 04:53	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:53	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	08/01/12 04:53	WAT	109-99-9	
Chloroform	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	08/01/12 04:53	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	08/01/12 04:53	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	56-23-5	
Benzene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:53	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	20	SW8260B/5035	08/01/12 04:53	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT		
o-Xylene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	95-47-6	
Styrene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:53	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	103-65-1	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.28 (continued)

Sample Tag: SB/MW-3-12(3'-4')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 04:53	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	08/01/12 04:53	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:53	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 04:53	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	380	SW8260B/5035	08/01/12 04:53	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	380	SW8260B/5035	08/01/12 04:53	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	380	SW8260B/5035	08/01/12 04:53	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	380	SW8260B/5035	08/01/12 04:53	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.29
Sample Tag: SB-28-12(2'-3')
Collected Date/Time: 07/19/2012 18:40
Matrix: Soil
COC Reference: 67837

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 11:45	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	87	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	3,800	mg/kg	2	SW6020	07/31/12 14:50	SLS	7429-90-5	
Arsenic	1.64	mg/kg	0.10	SW6020	07/30/12 19:37	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 19:37	SLS	7440-43-9	
Chromium	5.32	mg/kg	0.50	SW6020	07/30/12 19:37	SLS	7440-47-3	
Cobalt	3.67	mg/kg	0.50	SW6020	07/30/12 19:37	SLS	7440-48-4	
Copper	4.91	mg/kg	1.0	SW6020	07/30/12 19:37	SLS	7440-50-8	
Iron	7,100	mg/kg	5.1	SW6020	07/31/12 14:50	SLS	7439-89-6	
Manganese	302	mg/kg	0.50	SW6020	07/30/12 19:37	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:43	JRT	7439-97-6	
Vanadium	9.46	mg/kg	0.50	SW6020	07/30/12 19:37	SLS	7440-62-2	
Zinc	9.91	mg/kg	1.0	SW6020	07/30/12 19:37	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/02/12 16:33	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.29 (continued)

Sample Tag: SB-28-12(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/02/12 16:33	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/02/12 16:33	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/02/12 16:33	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/02/12 16:33	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/02/12 16:33	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/02/12 16:33	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/02/12 16:33	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/02/12 16:33	PL	88-06-2	

Organics - Volatiles

Volatile Organics 5035

Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	08/01/12 05:13	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	08/01/12 05:13	WAT	67-64-1	



Analytical Laboratory Report

Lab Sample ID: S53286.29 (continued)

Sample Tag: SB-28-12(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	08/01/12 05:13	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	08/01/12 05:13	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	980	SW8260B/5035	08/01/12 05:13	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 05:13	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 05:13	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 05:13	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 05:13	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	08/01/12 05:13	WAT	109-99-9	
Chloroform	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	08/01/12 05:13	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	08/01/12 05:13	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	56-23-5	
Benzene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 05:13	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	08/01/12 05:13	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT		
o-Xylene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	95-47-6	
Styrene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	08/01/12 05:13	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	103-65-1	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.29 (continued)

Sample Tag: SB-28-12(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	08/01/12 05:13	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	08/01/12 05:13	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	08/01/12 05:13	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	08/01/12 05:13	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	430	SW8260B/5035	08/01/12 05:13	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	430	SW8260B/5035	08/01/12 05:13	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	430	SW8260B/5035	08/01/12 05:13	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	430	SW8260B/5035	08/01/12 05:13	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.30
Sample Tag: SB-28-12(6'-7')
Collected Date/Time: 07/19/2012 18:45
Matrix: Soil
COC Reference: 67837

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Other / Misc.								
Hold until notified	Completed				07/26/12 08:17	PCS		



Analytical Laboratory Report

Lab Sample ID: S53286.31
Sample Tag: SB-27-12(2'-3')
Collected Date/Time: 07/20/2012 10:05
Matrix: Soil
COC Reference: 67837

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 11:45	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	89	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	2,580	mg/kg	2	SW6020	07/31/12 14:52	SLS	7429-90-5	
Arsenic	6.72	mg/kg	0.10	SW6020	07/30/12 19:40	SLS	7440-38-2	
Cadmium	3.14	mg/kg	0.20	SW6020	07/30/12 19:40	SLS	7440-43-9	
Chromium	43.8	mg/kg	0.50	SW6020	07/30/12 19:40	SLS	7440-47-3	
Cobalt	3.43	mg/kg	0.50	SW6020	07/30/12 19:40	SLS	7440-48-4	
Copper	52.5	mg/kg	1.0	SW6020	07/30/12 19:40	SLS	7440-50-8	
Iron	8,870	mg/kg	5.1	SW6020	07/31/12 14:52	SLS	7439-89-6	
Manganese	866	mg/kg	0.50	SW6020	07/30/12 19:40	SLS	7439-96-5	
Mercury	0.104	mg/kg	0.050	SW7471A	07/27/12 14:45	JRT	7439-97-6	
Vanadium	7.91	mg/kg	0.50	SW6020	07/30/12 19:40	SLS	7440-62-2	
Zinc	505	mg/kg	1.0	SW6020	07/30/12 19:40	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	208-96-8	
Anthracene	782	ug/kg	330	SW8270C	08/01/12 22:21	PL	120-12-7	
Benzo(a)anthracene	2,737	ug/kg	330	SW8270C	08/01/12 22:21	PL	56-55-3	
Benzo(b)fluoranthene	5,699	ug/kg	330	SW8270C	08/01/12 22:21	PL	205-99-2	p
Benzo(k)fluoranthene	5,690	ug/kg	330	SW8270C	08/01/12 22:21	PL	207-08-9	p
Benzo(ghi)perylene	1,200	ug/kg	330	SW8270C	08/01/12 22:21	PL	191-24-2	
Benzo(a)pyrene	3,200	ug/kg	330	SW8270C	08/01/12 22:21	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 22:21	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	7005-72-3	

p-Benzo(b)Fluoranthene and Benzo(k)Fluoranthene integrated as one peak.



Analytical Laboratory Report

Lab Sample ID: S53286.31 (continued)

Sample Tag: SB-27-12(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Chrysene	2,926	ug/kg	330	SW8270C	08/01/12 22:21	PL	218-01-9	
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	95-48-7	
Dibenzo(ah)anthracene	364	ug/kg	330	SW8270C	08/01/12 22:21	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 22:21	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 22:21	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 22:21	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	117-84-0	
Fluoranthene	5,730	ug/kg	330	SW8270C	08/01/12 22:21	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	1,101	ug/kg	330	SW8270C	08/01/12 22:21	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 22:21	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 22:21	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 22:21	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 22:21	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	87-86-5	
Phenanthrene	3,389	ug/kg	330	SW8270C	08/01/12 22:21	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	108-95-2	
Pyrene	5,649	ug/kg	330	SW8270C	08/01/12 22:21	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 22:21	PL	88-06-2	

Organics - Volatiles

Volatile Organics 5035

Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:54	WAT	60-29-7	



Analytical Laboratory Report

Lab Sample ID: S53286.31 (continued)

Sample Tag: SB-27-12(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 15:54	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:54	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:54	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	950	SW8260B/5035	07/31/12 15:54	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:54	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:54	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:54	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:54	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	75-34-3	
cis-1,2-Dichloroethene	100	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 15:54	WAT	109-99-9	
Chloroform	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 15:54	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 15:54	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	56-23-5	
Benzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	107-06-2	
Trichloroethene	130	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:54	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	10061-01-5	
Toluene	300	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	79-00-5	
Tetrachloroethene	1,710	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/31/12 15:54	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	630-20-6	
Ethylbenzene	70	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	100-41-4	
p,m-Xylene	300	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT		
o-Xylene	210	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	95-47-6	
Styrene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:54	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	96-18-4	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.31 (continued)

Sample Tag: SB-27-12(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	98-06-6	
1,2,4-Trimethylbenzene	200	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 15:54	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 15:54	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 15:54	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 15:54	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	420	SW8260B/5035	07/31/12 15:54	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	420	SW8260B/5035	07/31/12 15:54	WAT	87-61-6	
Naphthalene	490	ug/kg	420	SW8260B/5035	07/31/12 15:54	WAT	91-20-3	
2-Methylnaphthalene	510	ug/kg	420	SW8260B/5035	07/31/12 15:54	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.32
Sample Tag: SB-27-12(6'-7')
Collected Date/Time: 07/20/2012 10:11
Matrix: Soil
COC Reference: 67837

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Other / Misc.								
Hold until notified	Completed				07/26/12 08:17	PCS		



Analytical Laboratory Report

Lab Sample ID: S53286.33
Sample Tag: SB-18-12(2'-3')
Collected Date/Time: 07/20/2012 11:03
Matrix: Soil
COC Reference: 67837

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			SW7471A	07/27/12 11:45	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		
PNA Extraction	Completed			3550B	07/27/12 11:00	CCM		

Inorganics

Total Solids	97	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	1,170	mg/kg	1.9	SW6020	07/31/12 14:55	SLS	7429-90-5	
Arsenic	0.65	mg/kg	0.10	SW6020	07/30/12 19:44	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 19:44	SLS	7440-43-9	
Chromium	5.57	mg/kg	0.50	SW6020	07/30/12 19:44	SLS	7440-47-3	
Cobalt	0.57	mg/kg	0.50	SW6020	07/30/12 19:44	SLS	7440-48-4	
Copper	5.50	mg/kg	1.0	SW6020	07/30/12 19:44	SLS	7440-50-8	
Iron	3,320	mg/kg	4.7	SW6020	07/31/12 14:55	SLS	7439-89-6	
Manganese	120	mg/kg	0.50	SW6020	07/30/12 19:44	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:48	JRT	7439-97-6	
Vanadium	1.10	mg/kg	0.50	SW6020	07/30/12 19:44	SLS	7440-62-2	
Zinc	6.81	mg/kg	1.0	SW6020	07/30/12 19:44	SLS	7440-66-6	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 15:26	PL	90-12-0	



Analytical Laboratory Report

Lab Sample ID: S53286.33 (continued)

Sample Tag: SB-18-12(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:14	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:14	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:14	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:14	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	810	SW8260B/5035	07/31/12 16:14	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:14	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:14	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 16:14	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:14	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:14	WAT	109-99-9	
Chloroform	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 16:14	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 16:14	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	56-23-5	
Benzene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:14	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	20	SW8260B/5035	07/31/12 16:14	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT		
o-Xylene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	95-47-6	
Styrene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:14	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	79-34-5	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.33 (continued)

Sample Tag: SB-18-12(2'-3')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:14	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 16:14	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:14	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:14	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	360	SW8260B/5035	07/31/12 16:14	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	360	SW8260B/5035	07/31/12 16:14	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	360	SW8260B/5035	07/31/12 16:14	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	360	SW8260B/5035	07/31/12 16:14	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.34
Sample Tag: SB-18-12(8'-9')
Collected Date/Time: 07/20/2012 11:07
Matrix: Soil
COC Reference: 67837

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			SW7471A	07/27/12 11:45	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		
PNA Extraction	Completed			3550B	07/27/12 11:00	CCM		

Inorganics

Total Solids	85	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	4,720	mg/kg	2.1	SW6020	07/31/12 14:58	SLS	7429-90-5	
Arsenic	1.80	mg/kg	0.10	SW6020	07/30/12 19:47	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 19:47	SLS	7440-43-9	
Chromium	8.87	mg/kg	0.50	SW6020	07/30/12 19:47	SLS	7440-47-3	
Cobalt	4.61	mg/kg	0.50	SW6020	07/30/12 19:47	SLS	7440-48-4	
Copper	6.81	mg/kg	1.0	SW6020	07/30/12 19:47	SLS	7440-50-8	
Iron	8,840	mg/kg	5.3	SW6020	07/31/12 14:58	SLS	7439-89-6	
Manganese	231	mg/kg	0.50	SW6020	07/30/12 19:47	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:25	JRT	7439-97-6	
Vanadium	14.4	mg/kg	0.50	SW6020	07/30/12 19:47	SLS	7440-62-2	
Zinc	23.2	mg/kg	1.0	SW6020	07/30/12 19:47	SLS	7440-66-6	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 15:48	PL	90-12-0	



Analytical Laboratory Report

Lab Sample ID: S53286.34 (continued)

Sample Tag: SB-18-12(8'-9')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:34	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:34	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:34	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:34	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	990	SW8260B/5035	07/31/12 16:34	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:34	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:34	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:34	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:34	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:34	WAT	109-99-9	
Chloroform	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 16:34	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 16:34	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	56-23-5	
Benzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:34	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/31/12 16:34	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT		
o-Xylene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	95-47-6	
Styrene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:34	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	79-34-5	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.34 (continued)

Sample Tag: SB-18-12(8'-9')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:34	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:34	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:34	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:34	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	430	SW8260B/5035	07/31/12 16:34	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	430	SW8260B/5035	07/31/12 16:34	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	430	SW8260B/5035	07/31/12 16:34	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	430	SW8260B/5035	07/31/12 16:34	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.35
Sample Tag: SB-18-12(8'-9') DUP
Collected Date/Time: 07/20/2012 11:07
Matrix: Soil
COC Reference: 67837

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			SW7471A	07/27/12 11:45	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		
PNA Extraction	Completed			3550B	07/27/12 11:00	CCM		

Inorganics

Total Solids	82	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	4,400	mg/kg	2.2	SW6020	07/31/12 15:01	SLS	7429-90-5	
Arsenic	1.57	mg/kg	0.10	SW6020	07/30/12 19:50	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 19:50	SLS	7440-43-9	
Chromium	9.11	mg/kg	0.50	SW6020	07/30/12 19:50	SLS	7440-47-3	
Cobalt	6.77	mg/kg	0.50	SW6020	07/30/12 19:50	SLS	7440-48-4	
Copper	5.32	mg/kg	1.0	SW6020	07/30/12 19:50	SLS	7440-50-8	
Iron	7,280	mg/kg	5.5	SW6020	07/31/12 15:01	SLS	7439-89-6	
Manganese	312	mg/kg	0.50	SW6020	07/30/12 19:50	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:27	JRT	7439-97-6	
Vanadium	12.9	mg/kg	0.50	SW6020	07/30/12 19:50	SLS	7440-62-2	
Zinc	18.6	mg/kg	1.0	SW6020	07/30/12 19:50	SLS	7440-66-6	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 16:11	PL	90-12-0	



Analytical Laboratory Report

Lab Sample ID: S53286.35 (continued)

Sample Tag: SB-18-12(8'-9') DUP

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:54	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:54	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:54	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:54	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:54	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:54	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:54	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:54	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:54	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 16:54	WAT	109-99-9	
Chloroform	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 16:54	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 16:54	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	56-23-5	
Benzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:54	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/31/12 16:54	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT		
o-Xylene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	95-47-6	
Styrene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:54	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	79-34-5	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.35 (continued)

Sample Tag: SB-18-12(8'-9') DUP

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 16:54	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 16:54	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 16:54	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 16:54	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	460	SW8260B/5035	07/31/12 16:54	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	460	SW8260B/5035	07/31/12 16:54	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	460	SW8260B/5035	07/31/12 16:54	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	460	SW8260B/5035	07/31/12 16:54	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.36
Sample Tag: SB-19-12(3'-4')
Collected Date/Time: 07/20/2012 12:02
Matrix: Soil
COC Reference: 67837

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			SW7471A	07/27/12 11:45	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		
PNA Extraction	Completed			3550B	07/27/12 11:00	CCM		

Inorganics

Total Solids	89	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	4,040	mg/kg	2	SW6020	07/31/12 15:13	SLS	7429-90-5	
Arsenic	1.06	mg/kg	0.10	SW6020	07/30/12 20:08	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 20:08	SLS	7440-43-9	
Chromium	4.04	mg/kg	0.50	SW6020	07/30/12 20:08	SLS	7440-47-3	
Cobalt	4.87	mg/kg	0.50	SW6020	07/30/12 20:08	SLS	7440-48-4	
Copper	4.28	mg/kg	1.0	SW6020	07/30/12 20:08	SLS	7440-50-8	
Iron	5,080	mg/kg	5.2	SW6020	07/31/12 15:13	SLS	7439-89-6	
Manganese	411	mg/kg	0.50	SW6020	07/30/12 20:08	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:50	JRT	7439-97-6	
Vanadium	6.68	mg/kg	0.50	SW6020	07/30/12 20:08	SLS	7440-62-2	
Zinc	12.6	mg/kg	1.0	SW6020	07/30/12 20:08	SLS	7440-66-6	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 16:34	PL	90-12-0	



Analytical Laboratory Report

Lab Sample ID: S53286.36 (continued)

Sample Tag: SB-19-12(3'-4')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:14	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 17:14	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:14	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:14	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	900	SW8260B/5035	07/31/12 17:14	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:14	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:14	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:14	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:14	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 17:14	WAT	109-99-9	
Chloroform	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 17:14	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 17:14	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	56-23-5	
Benzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:14	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	20	SW8260B/5035	07/31/12 17:14	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT		
o-Xylene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	95-47-6	
Styrene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:14	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	79-34-5	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.36 (continued)

Sample Tag: SB-19-12(3'-4')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:14	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:14	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 17:14	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:14	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 17:14	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 17:14	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 17:14	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	400	SW8260B/5035	07/31/12 17:14	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.37

Sample Tag: SB-19-12(11'-12')

Collected Date/Time: 07/20/2012 12:10

Matrix: Soil

COC Reference: 67837

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Other / Misc.

Hold until notified	Completed				07/26/12 08:17	PCS		



Analytical Laboratory Report

Lab Sample ID: S53286.38
Sample Tag: SB-20-12(1'-2')
Collected Date/Time: 07/20/2012 13:30
Matrix: Soil
COC Reference: 67837

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			SW7471A	07/27/12 11:45	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		
PNA Extraction	Completed			3550B	07/27/12 11:00	CCM		

Inorganics

Total Solids	91	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	2,050	mg/kg	1.9	SW6020	07/31/12 15:16	SLS	7429-90-5	
Arsenic	1.73	mg/kg	0.10	SW6020	07/30/12 20:11	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 20:11	SLS	7440-43-9	
Chromium	3.60	mg/kg	0.50	SW6020	07/30/12 20:11	SLS	7440-47-3	
Cobalt	2.86	mg/kg	0.50	SW6020	07/30/12 20:11	SLS	7440-48-4	
Copper	4.80	mg/kg	1.0	SW6020	07/30/12 20:11	SLS	7440-50-8	
Iron	4,650	mg/kg	4.9	SW6020	07/31/12 15:16	SLS	7439-89-6	
Manganese	624	mg/kg	0.50	SW6020	07/30/12 20:11	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:52	JRT	7439-97-6	
Vanadium	6.78	mg/kg	0.50	SW6020	07/30/12 20:11	SLS	7440-62-2	
Zinc	8.45	mg/kg	1.0	SW6020	07/30/12 20:11	SLS	7440-66-6	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 16:56	PL	90-12-0	



Analytical Laboratory Report

Lab Sample ID: S53286.38 (continued)

Sample Tag: SB-20-12(1'-2')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:34	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 17:34	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:34	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:34	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	870	SW8260B/5035	07/31/12 17:34	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:34	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:34	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:34	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:34	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 17:34	WAT	109-99-9	
Chloroform	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 17:34	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 17:34	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	56-23-5	
Benzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:34	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	20	SW8260B/5035	07/31/12 17:34	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT		
o-Xylene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	95-47-6	
Styrene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:34	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	79-34-5	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.38 (continued)

Sample Tag: SB-20-12(1'-2')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:34	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:34	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:34	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:34	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	380	SW8260B/5035	07/31/12 17:34	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	380	SW8260B/5035	07/31/12 17:34	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	380	SW8260B/5035	07/31/12 17:34	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	380	SW8260B/5035	07/31/12 17:34	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.39

Sample Tag: SB-20-12(9'-9.5')

Collected Date/Time: 07/20/2012 13:36

Matrix: Soil

COC Reference: 67838

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Other / Misc.

Hold until notified	Completed				07/26/12 08:17	PCS		



Analytical Laboratory Report

Lab Sample ID: S53286.40
Sample Tag: SB/MW-5-12(3'-4')
Collected Date/Time: 07/20/2012 15:38
Matrix: Soil
COC Reference: 67838

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Other / Misc.								
Hold until notified	Completed				07/26/12 08:17	PCS		



Analytical Laboratory Report

Lab Sample ID: S53286.41
Sample Tag: SB/MW-5-12(9'10')
Collected Date/Time: 07/20/2012 15:46
Matrix: Soil
COC Reference: 67838

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3550B	07/30/12 23:51	EMR		
Mercury Digestion	Completed			SW7471A	07/27/12 11:45	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		

Inorganics

Total Solids	91	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	1,780	mg/kg	4.1	SW6020	07/31/12 15:19	SLS	7429-90-5	
Arsenic	1.00	mg/kg	0.10	SW6020	07/30/12 20:15	SLS	7440-38-2	
Cadmium	0.21	mg/kg	0.20	SW6020	07/30/12 20:15	SLS	7440-43-9	
Chromium	27.5	mg/kg	0.50	SW6020	07/30/12 20:15	SLS	7440-47-3	
Cobalt	1.52	mg/kg	0.50	SW6020	07/30/12 20:15	SLS	7440-48-4	
Copper	16.4	mg/kg	1.0	SW6020	07/30/12 20:15	SLS	7440-50-8	
Iron	18,000	mg/kg	10	SW6020	07/31/12 15:19	SLS	7439-89-6	
Manganese	343	mg/kg	0.50	SW6020	07/30/12 20:15	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:54	JRT	7439-97-6	
Vanadium	5.43	mg/kg	0.50	SW6020	07/30/12 20:15	SLS	7440-62-2	
Zinc	29.0	mg/kg	1.0	SW6020	07/30/12 20:15	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	208-96-8	
Anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	85-68-7	
4-Chloroaniline	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/kg	280	SW8270C	08/01/12 21:13	PL	59-50-7	
2-Chlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	7005-72-3	
Chrysene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	218-01-9	



Analytical Laboratory Report

Lab Sample ID: S53286.41 (continued)

Sample Tag: SB/MW-5-12(9'10')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
p,m-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	3/4-Cresol	
o-Cresol	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	53-70-3	
Dibenzofuran	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/kg	2,000	SW8270C	08/01/12 21:13	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	120-83-2	
Diethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/kg	830	SW8270C	08/01/12 21:13	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 21:13	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	117-84-0	
Fluoranthene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	206-44-0	
Fluorene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	77-47-4	
Hexachloroethane	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	193-39-5	
Isophorone	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	91-57-6	
Naphthalene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	91-20-3	
2-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 21:13	PL	88-74-4	
3-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 21:13	PL	99-09-2	
4-Nitroaniline	Not detected	ug/kg	830	SW8270C	08/01/12 21:13	PL	100-01-6	
Nitrobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	98-95-3	
2-Nitrophenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	88-75-5	
4-Nitrophenol	Not detected	ug/kg	830	SW8270C	08/01/12 21:13	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	621-64-7	
Pentachlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	87-86-5	
Phenanthrene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	85-01-8	
Phenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	108-95-2	
Pyrene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/kg	330	SW8270C	08/01/12 21:13	PL	88-06-2	
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:54	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 17:54	WAT	67-64-1	



Analytical Laboratory Report

Lab Sample ID: S53286.41 (continued)

Sample Tag: SB/MW-5-12(9'10')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:54	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:54	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	920	SW8260B/5035	07/31/12 17:54	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:54	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:54	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 17:54	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:54	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 17:54	WAT	109-99-9	
Chloroform	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 17:54	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 17:54	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	56-23-5	
Benzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:54	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	20	SW8260B/5035	07/31/12 17:54	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT		
o-Xylene	70	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	95-47-6	
Styrene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:54	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	103-65-1	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.41 (continued)

Sample Tag: SB/MW-5-12(9'10')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	98-06-6	
1,2,4-Trimethylbenzene	200	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	95-50-1	
1,2,3-Trimethylbenzene	100	ug/kg	100	SW8260B/5035	07/31/12 17:54	WAT	526-73-8	
n-Butylbenzene	90	ug/kg	60	SW8260B/5035	07/31/12 17:54	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 17:54	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 17:54	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	410	SW8260B/5035	07/31/12 17:54	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	410	SW8260B/5035	07/31/12 17:54	WAT	87-61-6	
Naphthalene	660	ug/kg	410	SW8260B/5035	07/31/12 17:54	WAT	91-20-3	
2-Methylnaphthalene	410	ug/kg	410	SW8260B/5035	07/31/12 17:54	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.42
Sample Tag: SB-15-12(5'-6')
Collected Date/Time: 07/20/2012 17:03
Matrix: Soil
COC Reference: 67838

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Other / Misc.

Hold until notified	Completed				07/26/12 08:17	PCS		



Analytical Laboratory Report

Lab Sample ID: S53286.43
Sample Tag: SB-15-12(11'-12')
Collected Date/Time: 07/20/2012 17:07
Matrix: Soil
COC Reference: 67838

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	4oz Glass	None	Yes	4.8	IR
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			SW7471A	07/27/12 11:45	JRH		
Metal Digestion	Completed			3050B	07/30/12 01:00	SLR		
PNA Extraction	Completed			3550B	07/27/12 11:00	CCM		

Inorganics

Total Solids	84	%	1	Std M 2540 B	07/24/12 14:30	SLR		

Metals

Aluminum	950	mg/kg	2.2	SW6020	07/31/12 15:22	SLS	7429-90-5	
Arsenic	0.84	mg/kg	0.10	SW6020	07/30/12 20:18	SLS	7440-38-2	
Cadmium	Not detected	mg/kg	0.20	SW6020	07/30/12 20:18	SLS	7440-43-9	
Chromium	2.03	mg/kg	0.50	SW6020	07/30/12 20:18	SLS	7440-47-3	
Cobalt	1.72	mg/kg	0.50	SW6020	07/30/12 20:18	SLS	7440-48-4	
Copper	5.91	mg/kg	1.0	SW6020	07/30/12 20:18	SLS	7440-50-8	
Iron	3,320	mg/kg	5.6	SW6020	07/31/12 15:22	SLS	7439-89-6	
Manganese	197	mg/kg	0.50	SW6020	07/30/12 20:18	SLS	7439-96-5	
Mercury	Not detected	mg/kg	0.050	SW7471A	07/27/12 14:57	JRT	7439-97-6	
Vanadium	4.94	mg/kg	0.50	SW6020	07/30/12 20:18	SLS	7440-62-2	
Zinc	12.8	mg/kg	1.0	SW6020	07/30/12 20:18	SLS	7440-66-6	

Organics - Semi-Volatiles

Polynuclear Aromatics

Acenaphthene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	83-32-9	
Acenaphthylene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	208-96-8	
Anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	56-55-3	
Benzo(a)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	50-32-8	
Benzo(b)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	191-24-2	
Chrysene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	218-01-9	
Dibenzo(ah)anthracene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	53-70-3	
Fluoranthene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	206-44-0	
Fluorene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	86-73-7	
Indeno(1,2,3-cd)pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	193-39-5	
Naphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	91-20-3	
Phenanthrene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	85-01-8	
Pyrene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	129-00-0	
2-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	91-57-6	
1-Methylnaphthalene	Not detected	ug/kg	300	SW8270C	07/31/12 17:19	PL	90-12-0	



Analytical Laboratory Report

Lab Sample ID: S53286.43 (continued)

Sample Tag: SB-15-12(11'-12')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:14	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 18:14	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:14	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:14	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 18:14	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:14	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:14	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:14	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:14	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 18:14	WAT	109-99-9	
Chloroform	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 18:14	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 18:14	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	56-23-5	
Benzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:14	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	30	SW8260B/5035	07/31/12 18:14	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	630-20-6	
Ethylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT		
o-Xylene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	95-47-6	
Styrene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:14	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	79-34-5	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.43 (continued)

Sample Tag: SB-15-12(11'-12')

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:14	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	70	SW8260B/5035	07/31/12 18:14	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	400	SW8260B/5035	07/31/12 18:14	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:14	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	450	SW8260B/5035	07/31/12 18:14	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	450	SW8260B/5035	07/31/12 18:14	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	450	SW8260B/5035	07/31/12 18:14	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	450	SW8260B/5035	07/31/12 18:14	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53286.44
Sample Tag: Trip Blank
Collected Date/Time: 07/20/2012 17:13
Matrix: Methanol
COC Reference: 67838

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	MeOH	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles								
Volatile Organics 5035								
Diethyl ether	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:34	WAT	60-29-7	
Acetone	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 18:34	WAT	67-64-1	
Methyl iodide	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	74-88-4	
Carbon disulfide	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:34	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:34	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/kg	750	SW8260B/5035	07/31/12 18:34	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:34	WAT	75-71-8	
Chloromethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:34	WAT	74-87-3	
Vinyl chloride	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	75-01-4	
Bromomethane	Not detected	ug/kg	200	SW8260B/5035	07/31/12 18:34	WAT	74-83-9	
Chloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:34	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	75-35-4	
Methylene chloride	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/kg	1,000	SW8260B/5035	07/31/12 18:34	WAT	109-99-9	
Chloroform	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	67-66-3	
Bromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 18:34	WAT	108-10-1	
2-Hexanone	Not detected	ug/kg	3,000	SW8260B/5035	07/31/12 18:34	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	56-23-5	
Benzene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	107-06-2	
Trichloroethene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	75-27-4	
Dibromomethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:34	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	10061-01-5	
Toluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/kg	20	SW8260B/5035	07/31/12 18:34	WAT	106-93-4	M
Chlorobenzene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	630-20-6	

M-Result reported to MDL not RDL



Analytical Laboratory Report

Lab Sample ID: S53286.44 (continued)

Sample Tag: Trip Blank

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics 5035 (continued)								
Ethylbenzene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	100-41-4	
p,m-Xylene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT		
o-Xylene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	95-47-6	
Styrene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:34	WAT	98-82-8	
Bromoform	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	103-65-1	
Bromobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/kg	100	SW8260B/5035	07/31/12 18:34	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/kg	50	SW8260B/5035	07/31/12 18:34	WAT	104-51-8	
Hexachloroethane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:34	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/kg	300	SW8260B/5035	07/31/12 18:34	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/kg	330	SW8260B/5035	07/31/12 18:34	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/kg	330	SW8260B/5035	07/31/12 18:34	WAT	87-61-6	
Naphthalene	Not detected	ug/kg	330	SW8260B/5035	07/31/12 18:34	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/kg	330	SW8260B/5035	07/31/12 18:34	WAT	91-57-6	



67836

INVOICE TO

CONTACT NAME David Favero		☐ SAME	
COMPANY RACER			
ADDRESS 2930 Ecorse Rd.			
CITY Ypsilanti		STATE MI	ZIP CODE 48198
PHONE NO. 217.741.6235		E-MAIL ADDRESS dfavero@racertrust.org	
ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)			

VOCs SVOCs, Al, As, Cd, Cr, Co, Cu, Hg, Fe, Mn, V, Zn PAHs, Al, As, Cd, Cr, Co, Cu, Hg, Fe, Mn, V, Zn		Certifications ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES Project Locations ☐ Detroit ☐ New York ☐ Other _____ Special Instructions

RELINQUISHED BY: SIGNATURE/ORGANIZATION			DATE 7/23/12		TIME 1520	
RELINQUISHED BY: SIGNATURE/ORGANIZATION			DATE 7/23/12		TIME 1500	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES:	TEMP. ON ARRIVAL	1500	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS				

Rev 1 15 12



67837

INVOICE TO

CONTACT NAME David Favero		☐ SAME	
COMPANY RACER			
ADDRESS 2930 Ecorse Rd.			
CITY Ypsilanti		STATE MI	ZIP CODE 48198
PHONE NO. 217.741.6235		E-MAIL ADDRESS dfavero@racertrust.org	
ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)			

VOCs SVOCs: Al, As, Cd, Co, Cr, Cu, Hg, Fe, Mn, V, Zn PAHs: Al, As, Cd, Cr, Co, Cu, Hg, Fe, Mn, V, Zn		Certifications ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES Project Locations ☐ Detroit ☐ New York ☐ Other _____ Special Instructions

RELINQUISHED BY: <i>Carroll</i>	☒ Sampler	DATE <i>7/23/12</i>	TIME <i>9:05</i>	RELINQUISHED BY: <i>Ch Ph</i>	DATE <i>7/23/12</i>	TIME <i>1500</i>
SIGNATURE/ORGANIZATION				SIGNATURE/ORGANIZATION		
RELINQUISHED BY: <i>For</i>		DATE <i>7/23/12</i>	TIME <i>1130</i>	RELINQUISHED BY: <i>Talib Font</i>	DATE <i>7/23/12</i>	TIME <i>1500</i>
SIGNATURE/ORGANIZATION				SIGNATURE/ORGANIZATION		
RELINQUISHED BY:		DATE	TIME	SEAL NO.	SEAL INTACT	INITIALS
SIGNATURE/ORGANIZATION					YES ☐	NO ☐
RELINQUISHED BY: <i>Ch Ph</i>	<i>White</i>	DATE <i>7/23/12</i>	TIME <i>1230</i>	SEAL NO.	SEAL INTACT	INITIALS
SIGNATURE/ORGANIZATION					YES ☐	NO ☐
				NOTES: TEMP. ON ARRIVAL <i>4.8</i>		

Rev 1 15 12



C.O.C. PAGE # 4 OF 4

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CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME David Favero		☐ SAME	
COMPANY RACER			
ADDRESS 2930 Ecorse Rd.			
CITY Ypsilanti		STATE MI	ZIP CODE 48198
PHONE NO. 017.741.6235		E-MAIL ADDRESS dfavero@racerfrust.org	
ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)			

VOCs SVOCs, Al, As, Cd, Co, Cr, Cu, Hg, Fe, Mn, V, Zn PAHs, Al, As, Cd, Co, Cr, Cu, Hg, Fe, Mn, V, Zn		Certifications ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES Project Locations ☐ Detroit ☐ New York ☐ Other _____ Special Instructions

HOLD
HOLD
HOLD
All samples stored in ice
<u>Racer info:</u>
Proposed # 100-10920-0010
PO # P0133645
task #: 4

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 7/23/12		TIME 1520	
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 7/23/12		TIME 1500	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES:	TEMP. ON ARRIVAL 48	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS			

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

APPENDIX D

LABORATORY REPORTS-GROUNDWATER/SURFACE WATER

Merit

Laboratories, Inc.

2680 East Lansing Dr., East Lansing, MI 48823
 Phone (517) 332-0167 Fax (517) 332-4034
 www.meritlabs.com

C.O.C. PAGE # _____ OF _____

67839

REPORT TO**CHAIN OF CUSTODY RECORD****INVOICE TO**

CONTACT NAME **BOB ZWALD**

COMPANY **WILCOX PROFESSIONAL SERVICES, LLC**

ADDRESS **37871 INTERCHANGE DRIVE**

CITY **FARMINGTON HILLS** STATE **MI** ZIP CODE **48335**

PHONE NO. **248-330-7844** FAX NO. **248-478-3986** P.O. NO. _____

E-MAIL ADDRESS **Bob.Zwald@Wilcox.us** QUOTE NO. _____

CONTACT NAME **DAVID FAVERO** ☐ SAME

COMPANY **RACER TRUST**

ADDRESS **2930 ECORSE RD.**

CITY **YPSILANTI** STATE **MI** ZIP CODE **48178**

PHONE NO. **248-741-6235** E-MAIL ADDRESS **dfavero@racertrust.org**

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME **RACER DAVISIN RD LANDFILL/P0133645** SAMPLER(S) - PLEASE PRINT/SIGN NAME **LARA LAMBERT**

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☐ STANDARD ☐ OTHER _____

DELIVERABLES REQUIRED ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____

MATRIX CODE GW=GROUNDWATER WW=WASTEWATER S=SOIL L=LIQUID SD=SOLID
 SL=SLUDGE DW=DRINKING WATER O=OIL WP=WIFE A=AIR W=WASTE

Containers & Preservatives

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	FOR BOTTLES	NONE	HC	HNO ₃	H ₂ SO ₄	NEOH	MeOH	OTHER	VOCs	SVOCs	Al, As, Cd, Cr, Co, Cu, Fe, Mn, V, Zn, Hg
	DATE	TIME													
53502.01	8/8/12	14:45	MW-2-12	W	4	1	2	1					✓	✓	✓
.02	8/8/12	16:10	MW-1	W	5	2	2	1					✓	✓	✓
.03	8/9/12	11:20	MW-14-12	W	5	2	2	1					✓	✓	✓
.04	8/9/12	13:10	MW-13-12	W	4	1	2	1					✓	✓	✓
.05	8/9/12	12:55	MW-4-12	W	4	1	2	1					✓	✓	✓
.06	8/9/12	10:40	MW-3-12	W	5	2	2	1					✓	✓	✓
.07			frip blank	N	1	1							✓		

Certifications

☐ OHIO VAP ☐ Drinking Water
☐ DoD ☐ NPDES

Project Locations

☐ Detroit ☐ New York

☐ Other _____

Special Instructions

RACER PROPOSAL #:

100-12920-0010

PROJECT #:

P0133645

TASK # 4

**All samples
contained on ice.**

RELINQUISHED BY: **Lara Lambert** ☒ Sampler DATE **8/9/12** TIME **12:16**

SIGNATURE/ORGANIZATION **W. T. F.**

RELINQUISHED BY: **MT** DATE **8-9-12** TIME **1:16**

SIGNATURE/ORGANIZATION _____

RELINQUISHED BY: _____ DATE _____ TIME _____

SIGNATURE/ORGANIZATION _____

RELINQUISHED BY: _____ DATE _____ TIME _____

SIGNATURE/ORGANIZATION _____

RELINQUISHED BY: **Ch. F.** DATE **8-9-12** TIME **15:15**

SIGNATURE/ORGANIZATION **T. F.**

RELINQUISHED BY: **T. F.** DATE **8/9/12** TIME **15:15**

SIGNATURE/ORGANIZATION _____

SEAL NO. SEAL INTACT INITIALS

YES ☐ NO ☐

SEAL NO. SEAL INTACT INITIALS

YES ☐ NO ☐

NOTES: TEMP. ON ARRIVAL **48**

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



Analytical Laboratory Report

Lab Sample ID: S53502.07 (continued)

Sample Tag: Trip Blank

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/16/12 18:53	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53502.07
Sample Tag: Trip Blank
Collected Date/Time: 08/09/2012 00:01
Matrix: Liquid
COC Reference: 67839

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW8260B	08/16/12 18:53	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/16/12 18:53	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/16/12 18:53	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/16/12 18:53	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/16/12 18:53	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/16/12 18:53	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/16/12 18:53	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/16/12 18:53	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:53	WAT	100-41-4	



Analytical Laboratory Report

Lab Sample ID: S53502.06 (continued)

Sample Tag: MW-3-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53502.06 (continued)

Sample Tag: MW-3-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/16/12 18:32	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/16/12 18:32	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/16/12 18:32	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/16/12 18:32	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/16/12 18:32	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/16/12 18:32	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S53502.06 (continued)

Sample Tag: MW-3-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/10/12 18:57	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/10/12 18:57	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 18:57	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 18:57	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 18:57	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/10/12 18:57	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/10/12 18:57	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/10/12 18:57	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 18:57	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/10/12 18:57	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/10/12 18:57	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 18:57	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 18:57	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 18:57	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/10/12 18:57	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/10/12 18:57	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/10/12 18:57	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/16/12 18:32	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/16/12 18:32	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/16/12 18:32	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/16/12 18:32	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S53502.06

Sample Tag: MW-3-12

Collected Date/Time: 08/09/2012 10:40

Matrix: Liquid

COC Reference: 67839

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
2	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/09/12 19:27	EMR		
Mercury Digestion	Completed			E245.1	08/14/12 10:30	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.037	mg/L	0.005	E200.8	08/20/12 14:16	SLS	7429-90-5	
Arsenic	0.025	mg/L	0.002	E200.8	08/20/12 14:16	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 14:16	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 14:16	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 14:16	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 14:16	SLS	7440-50-8	
Iron	6.17	mg/L	0.02	E200.8	08/20/12 14:16	SLS	7439-89-6	
Manganese	0.823	mg/L	0.005	E200.8	08/20/12 14:16	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/14/12 15:11	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 14:16	SLS	7440-62-2	
Zinc	0.010	mg/L	0.005	E200.8	08/20/12 14:16	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/10/12 18:57	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 18:57	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 18:57	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/10/12 18:57	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/10/12 18:57	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/10/12 18:57	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/10/12 18:57	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/10/12 18:57	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/10/12 18:57	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/10/12 18:57	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/10/12 18:57	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S53502.05 (continued)

Sample Tag: MW-4-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53502.05 (continued)

Sample Tag: MW-4-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/16/12 18:12	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/16/12 18:12	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/16/12 18:12	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/16/12 18:12	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/16/12 18:12	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/16/12 18:12	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S53502.05 (continued)

Sample Tag: MW-4-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/10/12 20:39	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/10/12 20:39	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 20:39	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 20:39	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 20:39	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/10/12 20:39	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/10/12 20:39	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/10/12 20:39	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 20:39	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/10/12 20:39	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/10/12 20:39	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 20:39	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 20:39	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 20:39	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/10/12 20:39	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/10/12 20:39	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/10/12 20:39	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/16/12 18:12	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/16/12 18:12	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/16/12 18:12	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/16/12 18:12	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S53502.05

Sample Tag: MW-4-12

Collected Date/Time: 08/09/2012 12:55

Matrix: Liquid

COC Reference: 67839

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	4.8	IR
2	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/09/12 19:27	EMR		
Mercury Digestion	Completed			E245.1	08/14/12 10:30	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.044	mg/L	0.005	E200.8	08/20/12 14:13	SLS	7429-90-5	
Arsenic	0.005	mg/L	0.002	E200.8	08/20/12 14:13	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 14:13	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 14:13	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 14:13	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 14:13	SLS	7440-50-8	
Iron	0.33	mg/L	0.02	E200.8	08/20/12 14:13	SLS	7439-89-6	
Manganese	0.417	mg/L	0.005	E200.8	08/20/12 14:13	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/14/12 15:09	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 14:13	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/20/12 14:13	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/10/12 20:39	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 20:39	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 20:39	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/10/12 20:39	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/10/12 20:39	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/10/12 20:39	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/10/12 20:39	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/10/12 20:39	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/10/12 20:39	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/10/12 20:39	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/10/12 20:39	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S53502.04 (continued)

Sample Tag: MW-13-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53502.04 (continued)

Sample Tag: MW-13-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/16/12 17:52	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/16/12 17:52	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/16/12 17:52	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/16/12 17:52	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/16/12 17:52	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/16/12 17:52	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S53502.04 (continued)

Sample Tag: MW-13-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/10/12 18:22	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/10/12 18:22	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 18:22	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 18:22	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 18:22	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/10/12 18:22	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/10/12 18:22	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/10/12 18:22	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 18:22	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/10/12 18:22	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/10/12 18:22	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 18:22	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 18:22	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 18:22	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/10/12 18:22	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	621-64-7	
Pentachlorophenol	25	ug/L	5	SW8270C	08/10/12 18:22	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/10/12 18:22	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/10/12 18:22	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/16/12 17:52	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/16/12 17:52	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/16/12 17:52	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/16/12 17:52	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S53502.04
Sample Tag: MW-13-12
Collected Date/Time: 08/09/2012 13:10
Matrix: Liquid
COC Reference: 67839

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	4.8	IR
2	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/09/12 19:27	EMR		
Mercury Digestion	Completed			E245.1	08/14/12 10:30	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.012	mg/L	0.005	E200.8	08/20/12 14:10	SLS	7429-90-5	
Arsenic	Not detected	mg/L	0.002	E200.8	08/20/12 14:10	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 14:10	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 14:10	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 14:10	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 14:10	SLS	7440-50-8	
Iron	0.07	mg/L	0.02	E200.8	08/20/12 14:10	SLS	7439-89-6	
Manganese	0.304	mg/L	0.005	E200.8	08/20/12 14:10	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/14/12 15:06	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 14:10	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/20/12 14:10	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/10/12 18:22	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 18:22	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 18:22	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/10/12 18:22	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/10/12 18:22	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/10/12 18:22	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/10/12 18:22	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/10/12 18:22	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/10/12 18:22	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/10/12 18:22	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/10/12 18:22	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S53502.03 (continued)

Sample Tag: MW-14-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53502.03 (continued)

Sample Tag: MW-14-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/16/12 03:25	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/16/12 03:25	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/16/12 03:25	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/16/12 03:25	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/16/12 03:25	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/16/12 03:25	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S53502.03 (continued)

Sample Tag: MW-14-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/10/12 17:48	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/10/12 17:48	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 17:48	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 17:48	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 17:48	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/10/12 17:48	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/10/12 17:48	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/10/12 17:48	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 17:48	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/10/12 17:48	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/10/12 17:48	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 17:48	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 17:48	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 17:48	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/10/12 17:48	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/10/12 17:48	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/10/12 17:48	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/16/12 03:25	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/16/12 03:25	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/16/12 03:25	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/16/12 03:25	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S53502.03

Sample Tag: MW-14-12

Collected Date/Time: 08/09/2012 11:20

Matrix: Liquid

COC Reference: 67839

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
2	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/09/12 19:27	EMR		
Mercury Digestion	Completed			E245.1	08/14/12 10:30	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.038	mg/L	0.005	E200.8	08/20/12 14:07	SLS	7429-90-5	
Arsenic	Not detected	mg/L	0.002	E200.8	08/20/12 14:07	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 14:07	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 14:07	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 14:07	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 14:07	SLS	7440-50-8	
Iron	0.06	mg/L	0.02	E200.8	08/20/12 14:07	SLS	7439-89-6	
Manganese	0.184	mg/L	0.005	E200.8	08/20/12 14:07	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/14/12 15:04	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 14:07	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/20/12 14:07	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/10/12 17:48	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 17:48	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 17:48	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/10/12 17:48	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/10/12 17:48	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/10/12 17:48	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/10/12 17:48	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/10/12 17:48	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/10/12 17:48	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/10/12 17:48	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/10/12 17:48	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S53502.02 (continued)

Sample Tag: MW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53502.02 (continued)

Sample Tag: MW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/16/12 03:05	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/16/12 03:05	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/16/12 03:05	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/16/12 03:05	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/16/12 03:05	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/16/12 03:05	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S53502.02 (continued)

Sample Tag: MW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/10/12 17:14	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/10/12 17:14	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 17:14	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 17:14	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 17:14	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/10/12 17:14	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/10/12 17:14	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/10/12 17:14	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 17:14	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/10/12 17:14	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/10/12 17:14	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 17:14	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 17:14	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 17:14	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/10/12 17:14	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/10/12 17:14	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/10/12 17:14	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/16/12 03:05	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/16/12 03:05	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/16/12 03:05	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/16/12 03:05	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S53502.02

Sample Tag: MW-1

Collected Date/Time: 08/08/2012 16:10

Matrix: Liquid

COC Reference: 67839

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
2	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/09/12 19:27	EMR		
Mercury Digestion	Completed			E245.1	08/14/12 10:30	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.012	mg/L	0.005	E200.8	08/20/12 14:04	SLS	7429-90-5	
Arsenic	0.006	mg/L	0.002	E200.8	08/20/12 14:04	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 14:04	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 14:04	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 14:04	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 14:04	SLS	7440-50-8	
Iron	1.27	mg/L	0.02	E200.8	08/20/12 14:04	SLS	7439-89-6	
Manganese	1.59	mg/L	0.005	E200.8	08/20/12 14:04	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/14/12 15:02	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 14:04	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/20/12 14:04	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/10/12 17:14	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 17:14	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 17:14	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/10/12 17:14	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/10/12 17:14	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/10/12 17:14	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/10/12 17:14	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/10/12 17:14	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/10/12 17:14	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/10/12 17:14	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/10/12 17:14	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S53502.01 (continued)

Sample Tag: MW-2-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53502.01 (continued)

Sample Tag: MW-2-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/16/12 02:44	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/16/12 02:44	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/16/12 02:44	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/16/12 02:44	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/16/12 02:44	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/16/12 02:44	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S53502.01 (continued)

Sample Tag: MW-2-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/10/12 16:40	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/10/12 16:40	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 16:40	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 16:40	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/10/12 16:40	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/10/12 16:40	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/10/12 16:40	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/10/12 16:40	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 16:40	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/10/12 16:40	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/10/12 16:40	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 16:40	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 16:40	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/10/12 16:40	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/10/12 16:40	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/10/12 16:40	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/10/12 16:40	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/16/12 02:44	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/16/12 02:44	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/16/12 02:44	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/16/12 02:44	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S53502.01
Sample Tag: MW-2-12
Collected Date/Time: 08/08/2012 14:45
Matrix: Liquid
COC Reference: 67839

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	4.8	IR
2	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/09/12 19:27	EMR		
Mercury Digestion	Completed			E245.1	08/14/12 10:30	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.021	mg/L	0.005	E200.8	08/20/12 14:01	SLS	7429-90-5	
Arsenic	0.002	mg/L	0.002	E200.8	08/20/12 14:01	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 14:01	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 14:01	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 14:01	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 14:01	SLS	7440-50-8	
Iron	0.18	mg/L	0.02	E200.8	08/20/12 14:01	SLS	7439-89-6	
Manganese	0.347	mg/L	0.005	E200.8	08/20/12 14:01	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/14/12 15:00	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 14:01	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/20/12 14:01	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/10/12 16:40	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 16:40	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/10/12 16:40	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/10/12 16:40	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/10/12 16:40	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/10/12 16:40	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/10/12 16:40	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/10/12 16:40	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/10/12 16:40	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/10/12 16:40	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/10/12 16:40	PL	95-48-7	



Analytical Laboratory Report

Sample Summary (7 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S53502.01	MW-2-12	Liquid	08/08/2012 14:45
S53502.02	MW-1	Liquid	08/08/2012 16:10
S53502.03	MW-14-12	Liquid	08/09/2012 11:20
S53502.04	MW-13-12	Liquid	08/09/2012 13:10
S53502.05	MW-4-12	Liquid	08/09/2012 12:55
S53502.06	MW-3-12	Liquid	08/09/2012 10:40
S53502.07	Trip Blank	Liquid	08/09/2012 00:01



Analytical Laboratory Report

Report ID: S53502.01(01)
Generated on 08/20/2012

Report to

Attention: Bob Zwald
Wilcox
37871 Interchange Drive
Farmington Hills, MI 48335

Phone: 248-330-7844 FAX: 248-478-3986
Email: Bob.Zwald@Wilcox.us

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S53502.01-S53502.07
Project: Racer Davison Road Landfill/ PO133645
Collected Date: 08/08/2012 - 08/09/2012
Submitted Date/Time: 08/09/2012 15:15
Sampled by: Lambert/McMurray
P.O. #: PO133645

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Samples are held by the lab for 30 days from the sample submittal date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#L11-184), WBENC (#2005110032)
Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814), NELAC FL (#E871045)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



67840

INVOICE TO

CONTACT NAME		DAVID FAVERO		☐ SAME	
COMPANY		RACER TRUST			
ADDRESS		2930 ELORSE RD.			
CITY		YPSILANTI		STATE	MI
				ZIP CODE	48198
PHONE NO.		E-MAIL ADDRESS			
517-741-6235		dfavero@racertrust.org			
ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)					

VOCs	SVOCs Al, As, Cd, Cr, Cu, Fe, Mn, V, Zn, Hg, Co	Dissolved Metals				Certifications ☐ OHIO VAP ☐ Drinking Water ☐ DoD ☐ NPDES
						Project Locations ☐ Detroit ☐ New York ☐ Other _____
						Special Instructions

RELINQUISHED BY: SIGNATURE/ORGANIZATION	<i>[Signature]</i>	DATE 8-10-12	TIME 1445	RELINQUISHED BY: SIGNATURE/ORGANIZATION	<i>[Signature]</i>	DATE 8-10-12	TIME 1549
RELINQUISHED BY: SIGNATURE/ORGANIZATION	<i>[Signature]</i>	DATE 8-10-12	TIME 1445	RELINQUISHED BY: SIGNATURE/ORGANIZATION	<i>[Signature]</i>	DATE 8-10-12	TIME 1546
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME	SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES: TEMP. ON ARRIVAL <i>48</i>
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE	TIME	SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	

Rev 115 12



Analytical Laboratory Report

Lab Sample ID: S53529.08 (continued)

Sample Tag: Trip Blank

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/16/12 06:50	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53529.08
Sample Tag: Trip Blank
Collected Date/Time: 08/09/2012 00:01
Matrix: Liquid
COC Reference: 67840

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW8260B	08/16/12 06:50	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/16/12 06:50	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/16/12 06:50	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/16/12 06:50	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/16/12 06:50	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/16/12 06:50	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/16/12 06:50	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/16/12 06:50	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:50	WAT	100-41-4	



Analytical Laboratory Report

Lab Sample ID: S53529.07 (continued)

Sample Tag: TW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53529.07 (continued)

Sample Tag: TW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/16/12 06:30	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/16/12 06:30	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/16/12 06:30	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/16/12 06:30	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/16/12 06:30	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/16/12 06:30	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S53529.07 (continued)

Sample Tag: TW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/16/12 18:14	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/16/12 18:14	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 18:14	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 18:14	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 18:14	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 18:14	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/16/12 18:14	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 18:14	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 18:14	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/16/12 18:14	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/16/12 18:14	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 18:14	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 18:14	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 18:14	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 18:14	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/16/12 18:14	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/16/12 18:14	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/16/12 06:30	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/16/12 06:30	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/16/12 06:30	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/16/12 06:30	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S53529.07

Sample Tag: TW-1

Collected Date/Time: 08/09/2012 16:10

Matrix: Liquid

COC Reference: 67840

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
2	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/15/12 15:55	EMR		
Mercury Digestion	Completed			E245.1	08/16/12 11:35	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.029	mg/L	0.005	E200.8	08/20/12 14:53	SLS	7429-90-5	
Arsenic	0.003	mg/L	0.002	E200.8	08/20/12 14:53	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 14:53	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 14:53	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 14:53	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 14:53	SLS	7440-50-8	
Iron	0.84	mg/L	0.02	E200.8	08/20/12 14:53	SLS	7439-89-6	
Manganese	0.325	mg/L	0.005	E200.8	08/20/12 14:53	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/16/12 15:43	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 14:53	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/20/12 14:53	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/16/12 18:14	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 18:14	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 18:14	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/16/12 18:14	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/16/12 18:14	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/16/12 18:14	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 18:14	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 18:14	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/16/12 18:14	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/16/12 18:14	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/16/12 18:14	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S53529.06 (continued)

Sample Tag: MW-9-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53529.06 (continued)

Sample Tag: MW-9-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/16/12 06:09	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/16/12 06:09	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/16/12 06:09	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/16/12 06:09	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/16/12 06:09	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/16/12 06:09	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S53529.06 (continued)

Sample Tag: MW-9-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/16/12 17:39	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/16/12 17:39	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 17:39	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 17:39	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 17:39	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 17:39	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/16/12 17:39	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 17:39	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 17:39	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/16/12 17:39	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/16/12 17:39	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 17:39	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 17:39	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 17:39	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 17:39	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/16/12 17:39	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/16/12 17:39	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/16/12 06:09	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/16/12 06:09	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/16/12 06:09	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/16/12 06:09	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S53529.06
Sample Tag: MW-9-12
Collected Date/Time: 08/09/2012 17:15
Matrix: Liquid
COC Reference: 67840

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	4.8	IR
2	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/15/12 15:55	EMR		
Mercury Digestion	Completed			E245.1	08/16/12 11:35	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.031	mg/L	0.005	E200.8	08/20/12 14:50	SLS	7429-90-5	
Arsenic	0.003	mg/L	0.002	E200.8	08/20/12 14:50	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 14:50	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 14:50	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 14:50	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 14:50	SLS	7440-50-8	
Iron	0.09	mg/L	0.02	E200.8	08/20/12 14:50	SLS	7439-89-6	
Manganese	0.162	mg/L	0.005	E200.8	08/20/12 14:50	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/16/12 15:40	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 14:50	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/20/12 14:50	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/16/12 17:39	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 17:39	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 17:39	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/16/12 17:39	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/16/12 17:39	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/16/12 17:39	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 17:39	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 17:39	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/16/12 17:39	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/16/12 17:39	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/16/12 17:39	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S53529.05 (continued)

Sample Tag: MW-7-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53529.05 (continued)

Sample Tag: MW-7-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/16/12 05:49	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/16/12 05:49	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/16/12 05:49	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/16/12 05:49	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/16/12 05:49	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/16/12 05:49	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S53529.05 (continued)

Sample Tag: MW-7-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/16/12 17:05	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/16/12 17:05	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 17:05	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 17:05	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 17:05	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 17:05	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/16/12 17:05	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 17:05	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 17:05	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/16/12 17:05	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/16/12 17:05	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 17:05	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 17:05	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 17:05	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 17:05	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/16/12 17:05	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/16/12 17:05	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/16/12 05:49	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/16/12 05:49	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/16/12 05:49	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/16/12 05:49	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S53529.05

Sample Tag: MW-7-12

Collected Date/Time: 08/09/2012 15:10

Matrix: Liquid

COC Reference: 67840

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	4.8	IR
2	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/15/12 15:55	EMR		
Mercury Digestion	Completed			E245.1	08/16/12 11:35	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.025	mg/L	0.005	E200.8	08/20/12 14:47	SLS	7429-90-5	
Arsenic	0.003	mg/L	0.002	E200.8	08/20/12 14:47	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 14:47	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 14:47	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 14:47	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 14:47	SLS	7440-50-8	
Iron	0.12	mg/L	0.02	E200.8	08/20/12 14:47	SLS	7439-89-6	
Manganese	0.029	mg/L	0.005	E200.8	08/20/12 14:47	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/16/12 15:45	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 14:47	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/20/12 14:47	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/16/12 17:05	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 17:05	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 17:05	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/16/12 17:05	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/16/12 17:05	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/16/12 17:05	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 17:05	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 17:05	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/16/12 17:05	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/16/12 17:05	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/16/12 17:05	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S53529.04 (continued)

Sample Tag: MW-4-04

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/16/12 05:28	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53529.04

Sample Tag: MW-4-04

Collected Date/Time: 08/09/2012 17:20

Matrix: Liquid

COC Reference: 67840

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

Mercury Digestion	Completed			E245.1	08/16/12 11:35	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.509	mg/L	0.005	E200.8	08/20/12 14:44	SLS	7429-90-5	
Arsenic	0.008	mg/L	0.002	E200.8	08/20/12 14:44	SLS	7440-38-2	
Cadmium	0.0011	mg/L	0.0005	E200.8	08/20/12 14:44	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 14:44	SLS	7440-47-3	
Cobalt	0.023	mg/L	0.005	E200.8	08/20/12 14:44	SLS	7440-48-4	
Copper	0.022	mg/L	0.004	E200.8	08/20/12 14:44	SLS	7440-50-8	
Iron	9.36	mg/L	0.02	E200.8	08/20/12 14:44	SLS	7439-89-6	
Manganese	4.74	mg/L	0.005	E200.8	08/20/12 14:44	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/16/12 15:38	JRT	7439-97-6	
Vanadium	0.005	mg/L	0.004	E200.8	08/20/12 14:44	SLS	7440-62-2	
Zinc	0.065	mg/L	0.005	E200.8	08/20/12 14:44	SLS	7440-66-6	

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW8260B	08/16/12 05:28	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/16/12 05:28	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/16/12 05:28	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/16/12 05:28	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/16/12 05:28	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/16/12 05:28	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:28	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/16/12 05:28	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/16/12 05:28	WAT	591-78-6	



Analytical Laboratory Report

Lab Sample ID: S53529.03 (continued)

Sample Tag: MW-10-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53529.03 (continued)

Sample Tag: MW-10-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/16/12 05:07	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/16/12 05:07	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/16/12 05:07	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/16/12 05:07	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/16/12 05:07	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/16/12 05:07	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S53529.03 (continued)

Sample Tag: MW-10-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/16/12 16:31	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/16/12 16:31	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 16:31	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 16:31	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 16:31	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 16:31	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/16/12 16:31	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 16:31	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 16:31	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/16/12 16:31	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/16/12 16:31	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 16:31	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 16:31	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 16:31	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 16:31	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/16/12 16:31	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/16/12 16:31	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/16/12 05:07	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/16/12 05:07	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/16/12 05:07	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/16/12 05:07	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S53529.03

Sample Tag: MW-10-12

Collected Date/Time: 08/10/2012 11:25

Matrix: Liquid

COC Reference: 67840

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	4.8	IR
2	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/15/12 15:55	EMR		
Mercury Digestion	Completed			E245.1	08/16/12 11:35	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.019	mg/L	0.005	E200.8	08/20/12 14:41	SLS	7429-90-5	
Arsenic	0.166	mg/L	0.002	E200.8	08/20/12 14:41	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 14:41	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 14:41	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 14:41	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 14:41	SLS	7440-50-8	
Iron	21.7	mg/L	0.02	E200.8	08/20/12 14:41	SLS	7439-89-6	
Manganese	1.57	mg/L	0.005	E200.8	08/20/12 14:41	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/16/12 15:36	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 14:41	SLS	7440-62-2	
Zinc	0.014	mg/L	0.005	E200.8	08/20/12 14:41	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/16/12 16:31	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 16:31	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 16:31	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/16/12 16:31	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/16/12 16:31	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/16/12 16:31	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 16:31	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 16:31	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/16/12 16:31	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/16/12 16:31	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/16/12 16:31	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S53529.02 (continued)

Sample Tag: MW-6-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/16/12 04:47	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53529.02 (continued)

Sample Tag: MW-6-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Phenanthrene	Not detected	ug/L	2	SW8270C	08/16/12 15:57	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/16/12 15:57	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/16/12 04:47	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/16/12 04:47	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/16/12 04:47	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/16/12 04:47	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/16/12 04:47	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/16/12 04:47	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/16/12 04:47	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/16/12 04:47	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:47	WAT	108-90-7	



Analytical Laboratory Report

Lab Sample ID: S53529.02 (continued)

Sample Tag: MW-6-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/16/12 15:57	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 15:57	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/16/12 15:57	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/16/12 15:57	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/16/12 15:57	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/16/12 15:57	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/16/12 15:57	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 15:57	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 15:57	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 15:57	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 15:57	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/16/12 15:57	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 15:57	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 15:57	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/16/12 15:57	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/16/12 15:57	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 15:57	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 15:57	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 15:57	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 15:57	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	87-86-5	



Analytical Laboratory Report

Lab Sample ID: S53529.02
Sample Tag: MW-6-12
Collected Date/Time: 08/10/2012 11:03
Matrix: Liquid
COC Reference: 67840

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	4.8	IR
2	40ml Glass	HCL	Yes	4.8	IR
2	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/15/12 15:55	EMR		
Mercury Digestion	Completed			E245.1	08/16/12 11:35	JRH		
Mercury Digestion	Completed			E245.1	08/16/12 11:35	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum, Dissolved	0.005	mg/L	0.005	E200.8	08/20/12 14:25	SLS	7429-90-5	
Aluminum	0.032	mg/L	0.005	E200.8	08/20/12 14:22	SLS	7429-90-5	
Arsenic, Dissolved	0.019	mg/L	0.002	E200.8	08/20/12 14:25	SLS	7440-38-2	
Arsenic	0.019	mg/L	0.002	E200.8	08/20/12 14:22	SLS	7440-38-2	
Cadmium, Dissolved	Not detected	mg/L	0.0005	E200.8	08/20/12 14:25	SLS	7440-43-9	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 14:22	SLS	7440-43-9	
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	08/20/12 14:25	SLS	7440-47-3	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 14:22	SLS	7440-47-3	
Cobalt, Dissolved	Not detected	mg/L	0.005	E200.8	08/20/12 14:25	SLS	7440-48-4	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 14:22	SLS	7440-48-4	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	08/20/12 14:25	SLS	7440-50-8	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 14:22	SLS	7440-50-8	
Iron, Dissolved	9.91	mg/L	0.02	E200.8	08/20/12 14:25	SLS	7439-89-6	
Iron	10.2	mg/L	0.02	E200.8	08/20/12 14:22	SLS	7439-89-6	
Manganese, Dissolved	0.989	mg/L	0.005	E200.8	08/20/12 14:25	SLS	7439-96-5	
Manganese	1.02	mg/L	0.005	E200.8	08/20/12 14:22	SLS	7439-96-5	
Mercury, Dissolved	Not detected	mg/L	0.0002	E245.1	08/16/12 15:34	JRT	7439-97-6	
Mercury	Not detected	mg/L	0.0002	E245.1	08/16/12 15:31	JRT	7439-97-6	
Vanadium, Dissolved	Not detected	mg/L	0.004	E200.8	08/20/12 14:25	SLS	7440-62-2	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 14:22	SLS	7440-62-2	
Zinc, Dissolved	Not detected	mg/L	0.005	E200.8	08/20/12 14:25	SLS	7440-66-6	
Zinc	Not detected	mg/L	0.005	E200.8	08/20/12 14:22	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/16/12 15:57	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 15:57	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 15:57	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/16/12 15:57	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/16/12 15:57	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/16/12 15:57	PL	111-91-1	



Analytical Laboratory Report

Lab Sample ID: S53529.01 (continued)

Sample Tag: MW-12-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53529.01 (continued)

Sample Tag: MW-12-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/16/12 04:27	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/16/12 04:27	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/16/12 04:27	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/16/12 04:27	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/16/12 04:27	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/16/12 04:27	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/16/12 04:27	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S53529.01 (continued)

Sample Tag: MW-12-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/16/12 15:23	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/16/12 15:23	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 15:23	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 15:23	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 15:23	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 15:23	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	105-67-9	
Dimethyl phthalate	6	ug/L	5	SW8270C	08/16/12 15:23	PL	131-11-3	B
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/16/12 15:23	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 15:23	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 15:23	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/16/12 15:23	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/16/12 15:23	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 15:23	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 15:23	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 15:23	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 15:23	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/16/12 15:23	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/16/12 15:23	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/16/12 04:27	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/16/12 04:27	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/16/12 04:27	WAT	74-88-4	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S53529.01
Sample Tag: MW-12-12
Collected Date/Time: 08/09/2012 15:47
Matrix: Liquid
COC Reference: 67840

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
2	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/15/12 15:55	EMR		
Mercury Digestion	Completed			E245.1	08/16/12 11:35	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.013	mg/L	0.005	E200.8	08/20/12 14:19	SLS	7429-90-5	
Arsenic	0.039	mg/L	0.002	E200.8	08/20/12 14:19	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 14:19	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 14:19	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 14:19	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 14:19	SLS	7440-50-8	
Iron	23.7	mg/L	0.02	E200.8	08/20/12 14:19	SLS	7439-89-6	
Manganese	4.60	mg/L	0.005	E200.8	08/20/12 14:19	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/16/12 15:29	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 14:19	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/20/12 14:19	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/16/12 15:23	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 15:23	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 15:23	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/16/12 15:23	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/16/12 15:23	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/16/12 15:23	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 15:23	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 15:23	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/16/12 15:23	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/16/12 15:23	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/16/12 15:23	PL	95-48-7	



Analytical Laboratory Report

Sample Summary (8 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S53529.01	MW-12-12	Liquid	08/09/2012 15:47
S53529.02	MW-6-12	Liquid	08/10/2012 11:03
S53529.03	MW-10-12	Liquid	08/10/2012 11:25
S53529.04	MW-4-04	Liquid	08/09/2012 17:20
S53529.05	MW-7-12	Liquid	08/09/2012 15:10
S53529.06	MW-9-12	Liquid	08/09/2012 17:15
S53529.07	TW-1	Liquid	08/09/2012 16:10
S53529.08	Trip Blank	Liquid	08/09/2012 00:01



Analytical Laboratory Report

Report ID: S53529.01(01)
Generated on 08/20/2012

Report to

Attention: Bob Zwald
Wilcox
37871 Interchange Drive
Farmington Hills, MI 48335

Phone: 248-330-7844 FAX: 248-478-3986
Email: Bob.Zwald@Wilcox.us

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S53529.01-S53529.08
Project: Racer Davison Road Landfill/ PO133645
Collected Date: 08/09/2012 - 08/10/2012
Submitted Date/Time: 08/10/2012 15:40
Sampled by: Lambert
P.O. #: PO133645

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Samples are held by the lab for 30 days from the sample submittal date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#L11-184), WBENC (#2005110032)
Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814), NELAC FL (#E871045)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME		BOB ZWALD	
COMPANY		WILCOX	
ADDRESS			
37871 INTERCHANGE			
CITY		STATE	ZIP CODE
FARMINGTON HILLS		MI	48335
PHONE NO.	FAX NO.	P.O. NO.	
248-330-7844	248-470-3986		
E-MAIL ADDRESS		QUOTE NO.	
Bob.Zwaid@wilcox.us			

CONTACT NAME		DAVID FAVERO		☐ SAME	
COMPANY		RACER TRUST			
ADDRESS 2930 ECIRSE RD.					
CITY		YPSILANTI		STATE	MI
				ZIP CODE	48198
PHONE NO.		E-MAIL ADDRESS			
247-741-6225		dfavero@racertrust.ig			
ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)					

PROJECT NO./NAME RACER DAWG RD LANDFILL POIZBYS	SAMPLER(S) - PLEASE PRINT/SIGN NAME Laura Lambert
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☐ STANDARD ☐ OTHER _____	
DELIVERABLES REQUIRED ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____	

MATRIX	GW-GROUNDWATER	WW-WASTEWATER	S-SOIL	L-LIQUID	SD-SOLID
CODE:	SL-SLUDGE	DW-DRINKING WATER	O-OIL	WP-WIPE	A-AIR
					W-WASTE

[illegible]

RELINQUISHED BY: <i>Cassidy Coyle</i>	☒ Sampler	DATE	TIME
SIGNATURE/ORGANIZATION		8/12/12	15:26
RELINQUISHED BY: <i>Steph PDS</i>		DATE	TIME
SIGNATURE/ORGANIZATION		8/13/12	15:14
RELINQUISHED BY: <i>SW</i>	<i>Med</i>	DATE	TIME
SIGNATURE/ORGANIZATION		8/14/12	11:00
RELINQUISHED BY: <i>A =</i>		DATE	TIME
SIGNATURE/ORGANIZATION		3-11-12	11:15

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE TIME	
RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE TIME	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES: TEMP. ON ARRIVAL <u>4</u>
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	



Analytical Laboratory Report

Lab Sample ID: S53550.05 (continued)

Sample Tag: MW-1-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53550.05 (continued)

Sample Tag: MW-1-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/21/12 21:59	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/21/12 21:59	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/21/12 21:59	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/21/12 21:59	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/21/12 21:59	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/21/12 21:59	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S53550.05 (continued)

Sample Tag: MW-1-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/16/12 21:06	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/16/12 21:06	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 21:06	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 21:06	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 21:06	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 21:06	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/16/12 21:06	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 21:06	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 21:06	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/16/12 21:06	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/16/12 21:06	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 21:06	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 21:06	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 21:06	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 21:06	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/16/12 21:06	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/16/12 21:06	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/21/12 21:59	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/21/12 21:59	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/21/12 21:59	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/21/12 21:59	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S53550.05

Sample Tag: MW-1-12

Collected Date/Time: 08/10/2012 18:45

Matrix: Liquid

COC Reference: 67841

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	4.1	IR
2	40ml Glass	HCL	Yes	4.1	IR
1	125ml Plastic	HNO3	Yes	4.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/15/12 15:55	EMR		
Mercury Digestion	Completed			E245.1	08/16/12 11:35	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.194	mg/L	0.005	E200.8	08/20/12 15:08	SLS	7429-90-5	
Arsenic	0.002	mg/L	0.002	E200.8	08/20/12 15:08	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 15:08	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 15:08	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 15:08	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 15:08	SLS	7440-50-8	
Iron	0.49	mg/L	0.02	E200.8	08/20/12 15:08	SLS	7439-89-6	
Manganese	0.226	mg/L	0.005	E200.8	08/20/12 15:08	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/16/12 15:18	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 15:08	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/20/12 15:08	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/16/12 21:06	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 21:06	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 21:06	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/16/12 21:06	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/16/12 21:06	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/16/12 21:06	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 21:06	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 21:06	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/16/12 21:06	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/16/12 21:06	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/16/12 21:06	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S53550.04 (continued)

Sample Tag: TW-6

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53550.04 (continued)

Sample Tag: TW-6

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/21/12 21:37	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/21/12 21:37	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/21/12 21:37	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/21/12 21:37	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/21/12 21:37	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/21/12 21:37	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S53550.04 (continued)

Sample Tag: TW-6

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/16/12 20:31	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/16/12 20:31	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 20:31	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 20:31	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 20:31	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 20:31	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/16/12 20:31	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 20:31	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 20:31	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/16/12 20:31	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/16/12 20:31	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 20:31	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 20:31	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 20:31	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 20:31	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/16/12 20:31	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/16/12 20:31	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/21/12 21:37	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/21/12 21:37	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/21/12 21:37	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/21/12 21:37	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S53550.04
Sample Tag: TW-6
Collected Date/Time: 08/10/2012 18:15
Matrix: Liquid
COC Reference: 67841

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	4.1	IR
2	40ml Glass	HCL	Yes	4.1	IR
1	125ml Plastic	HNO3	Yes	4.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/15/12 15:55	EMR		
Mercury Digestion	Completed			E245.1	08/16/12 11:35	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.211	mg/L	0.005	E200.8	08/20/12 15:05	SLS	7429-90-5	
Arsenic	0.009	mg/L	0.002	E200.8	08/20/12 15:05	SLS	7440-38-2	
Cadmium	0.0006	mg/L	0.0005	E200.8	08/20/12 15:05	SLS	7440-43-9	
Chromium	0.007	mg/L	0.005	E200.8	08/20/12 15:05	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 15:05	SLS	7440-48-4	
Copper	0.004	mg/L	0.004	E200.8	08/20/12 15:05	SLS	7440-50-8	
Iron	4.92	mg/L	0.02	E200.8	08/20/12 15:05	SLS	7439-89-6	
Manganese	0.308	mg/L	0.005	E200.8	08/20/12 15:05	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/16/12 15:16	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 15:05	SLS	7440-62-2	
Zinc	0.011	mg/L	0.005	E200.8	08/20/12 15:05	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/16/12 20:31	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 20:31	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 20:31	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/16/12 20:31	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/16/12 20:31	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/16/12 20:31	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 20:31	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 20:31	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/16/12 20:31	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/16/12 20:31	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/16/12 20:31	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S53550.03 (continued)

Sample Tag: MW-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53550.03 (continued)

Sample Tag: MW-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/21/12 21:16	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/21/12 21:16	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/21/12 21:16	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/21/12 21:16	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/21/12 21:16	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/21/12 21:16	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S53550.03 (continued)

Sample Tag: MW-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/16/12 19:57	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/16/12 19:57	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 19:57	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 19:57	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 19:57	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 19:57	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/16/12 19:57	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 19:57	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 19:57	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/16/12 19:57	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/16/12 19:57	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 19:57	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 19:57	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 19:57	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 19:57	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/16/12 19:57	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/16/12 19:57	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/21/12 21:16	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/21/12 21:16	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/21/12 21:16	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/21/12 21:16	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S53550.03
Sample Tag: MW-2
Collected Date/Time: 08/10/2012 17:25
Matrix: Liquid
COC Reference: 67841

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	4.1	IR
2	40ml Glass	HCL	Yes	4.1	IR
1	125ml Plastic	HNO3	Yes	4.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/15/12 15:55	EMR		
Mercury Digestion	Completed			E245.1	08/16/12 11:35	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.008	mg/L	0.005	E200.8	08/20/12 15:02	SLS	7429-90-5	
Arsenic	0.102	mg/L	0.002	E200.8	08/20/12 15:02	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 15:02	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 15:02	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 15:02	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 15:02	SLS	7440-50-8	
Iron	25.8	mg/L	0.02	E200.8	08/20/12 15:02	SLS	7439-89-6	
Manganese	3.12	mg/L	0.005	E200.8	08/20/12 15:02	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/16/12 15:13	JRT	7439-97-6	
Vanadium	0.006	mg/L	0.004	E200.8	08/20/12 15:02	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/20/12 15:02	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/16/12 19:57	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 19:57	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 19:57	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/16/12 19:57	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/16/12 19:57	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/16/12 19:57	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 19:57	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 19:57	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/16/12 19:57	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/16/12 19:57	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/16/12 19:57	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S53550.02 (continued)

Sample Tag: MW-5-12 (Dup)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53550.02 (continued)

Sample Tag: MW-5-12 (Dup)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/21/12 20:54	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/21/12 20:54	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/21/12 20:54	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/21/12 20:54	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/21/12 20:54	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/21/12 20:54	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S53550.02 (continued)

Sample Tag: MW-5-12 (Dup)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/16/12 19:23	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/16/12 19:23	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 19:23	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 19:23	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 19:23	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 19:23	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/16/12 19:23	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 19:23	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 19:23	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/16/12 19:23	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/16/12 19:23	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 19:23	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 19:23	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 19:23	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 19:23	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/16/12 19:23	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/16/12 19:23	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/21/12 20:54	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/21/12 20:54	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/21/12 20:54	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/21/12 20:54	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S53550.02
Sample Tag: MW-5-12 (Dup)
Collected Date/Time: 08/10/2012 00:01
Matrix: Liquid
COC Reference: 67841

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.1	IR
2	40ml Glass	HCL	Yes	4.1	IR
1	125ml Plastic	HNO3	Yes	4.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/15/12 15:55	EMR		
Mercury Digestion	Completed			E245.1	08/16/12 11:35	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.008	mg/L	0.005	E200.8	08/20/12 14:59	SLS	7429-90-5	
Arsenic	0.003	mg/L	0.002	E200.8	08/20/12 14:59	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 14:59	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 14:59	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 14:59	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 14:59	SLS	7440-50-8	
Iron	16.3	mg/L	0.02	E200.8	08/20/12 14:59	SLS	7439-89-6	
Manganese	1.51	mg/L	0.005	E200.8	08/20/12 14:59	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/16/12 15:11	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 14:59	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/20/12 14:59	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/16/12 19:23	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 19:23	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 19:23	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/16/12 19:23	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/16/12 19:23	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/16/12 19:23	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 19:23	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 19:23	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/16/12 19:23	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/16/12 19:23	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/16/12 19:23	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S53550.01 (continued)

Sample Tag: MW-5-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S53550.01 (continued)

Sample Tag: MW-5-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/21/12 20:32	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/21/12 20:32	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/21/12 20:32	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/21/12 20:32	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/21/12 20:32	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/21/12 20:32	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S53550.01 (continued)

Sample Tag: MW-5-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/16/12 18:48	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/16/12 18:48	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 18:48	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 18:48	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/16/12 18:48	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 18:48	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/16/12 18:48	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 18:48	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 18:48	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/16/12 18:48	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/16/12 18:48	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 18:48	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 18:48	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/16/12 18:48	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/16/12 18:48	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/16/12 18:48	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/16/12 18:48	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/21/12 20:32	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/21/12 20:32	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/21/12 20:32	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/21/12 20:32	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S53550.01

Sample Tag: MW-5-12

Collected Date/Time: 08/10/2012 14:23

Matrix: Liquid

COC Reference: 67841

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.1	IR
2	40ml Glass	HCL	Yes	4.1	IR
1	125ml Plastic	HNO3	Yes	4.1	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	08/15/12 15:55	EMR		
Mercury Digestion	Completed			E245.1	08/16/12 11:35	JRH		
Metal Digestion	Completed			3015A	08/20/12 01:00	SLR		

Metals

Aluminum	0.008	mg/L	0.005	E200.8	08/20/12 14:56	SLS	7429-90-5	
Arsenic	0.003	mg/L	0.002	E200.8	08/20/12 14:56	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	08/20/12 14:56	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	08/20/12 14:56	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	08/20/12 14:56	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	08/20/12 14:56	SLS	7440-50-8	
Iron	16.6	mg/L	0.02	E200.8	08/20/12 14:56	SLS	7439-89-6	
Manganese	1.54	mg/L	0.005	E200.8	08/20/12 14:56	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	08/16/12 15:09	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	08/20/12 14:56	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/20/12 14:56	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/16/12 18:48	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 18:48	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/16/12 18:48	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/16/12 18:48	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/16/12 18:48	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/16/12 18:48	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/16/12 18:48	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/16/12 18:48	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/16/12 18:48	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/16/12 18:48	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	08/16/12 18:48	PL	95-48-7	



Analytical Laboratory Report

Sample Summary (5 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S53550.01	MW-5-12	Liquid	08/10/2012 14:23
S53550.02	MW-5-12 (Dup)	Liquid	08/10/2012 00:01
S53550.03	MW-2	Liquid	08/10/2012 17:25
S53550.04	TW-6	Liquid	08/10/2012 18:15
S53550.05	MW-1-12	Liquid	08/10/2012 18:45



Analytical Laboratory Report

Report ID: S53550.01(01)
Generated on 08/22/2012

Report to

Attention: Bob Zwald
Wilcox
37871 Interchange Drive
Farmington Hills, MI 48335

Phone: 248-330-7844 FAX: 248-478-3986
Email: Bob.Zwald@Wilcox.us

Report produced by

Merit Laboratories
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Report Summary

Lab Sample ID(s): S53550.01-S53550.05
Project: Racer Davison Road Landfill/ PO133645
Collected Date: 08/10/2012
Submitted Date/Time: 08/14/2012 13:30
Sampled by: Laura Lambert
P.O. #: PO133645

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
"Not detected" indicates that parameter was not found at a level equal to or greater than the RL.
Samples are held by the lab for 30 days from the sample submittal date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories.

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#L11-184), WBENC (#2005110032)
Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814), NELAC FL (#E871045)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Report ID: S54543.01(01)
Generated on 11/21/2012

Report to

Attention: Bob Zwald
Wilcox
37871 Interchange Drive
Farmington Hills, MI 48335

Phone: 248-330-7844 FAX: 248-478-3986
Email: Bob.Zwald@Wilcox.us

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:

Andy Ball (andyball@meritlabs.com)
Tabitha Faust (tfaust@meritlabs.com)

Report Summary

Lab Sample ID(s): S54543.01-S54543.22
Project: Racer Davison Road Landfill/ PO133645
Collected Date: 11/06/2012 - 11/08/2012
Submitted Date/Time: 11/09/2012 14:10
Sampled by: Laura Lambert
P.O. #: PO133645

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc..

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#69699), WBENC (#2005110032), Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (22 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S54543.01	MW-1-12	Groundwater	11/06/2012 15:00
S54543.02	MW-2-12	Groundwater	11/06/2012 15:14
S54543.03	MW-1	Groundwater	11/06/2012 17:10
S54543.04	MW-3-12	Groundwater	11/06/2012 11:25
S54543.05	MW-6-12	Groundwater	11/06/2012 12:19
S54543.06	MW-14-12	Groundwater	11/06/2012 14:32
S54543.07	MW-4-12	Groundwater	11/06/2012 14:40
S54543.08	MW-7-12	Groundwater	11/06/2012 16:35
S54543.09	GC-1 (Upstream)	Groundwater	11/06/2012 15:42
S54543.10	GC-2 (Mid)	Groundwater	11/06/2012 16:22
S54543.11	GC-3 (Downstream)	Groundwater	11/06/2012 16:51
S54543.12	MW-13-12	Groundwater	11/06/2012 11:20
S54543.13	Trip Blank	Liquid	11/08/2012 00:01
S54543.14	MW-9-12	Groundwater	11/08/2012 11:35
S54543.15	TMW-6	Groundwater	11/08/2012 13:50
S54543.16	TMW-1	Groundwater	11/08/2012 14:30
S54543.17	MW-5-12	Groundwater	11/08/2012 15:15
S54543.18	MW-2	Groundwater	11/08/2012 16:10
S54543.19	Equipment Blank	Groundwater	11/08/2012 14:25
S54543.20	MW-9-12 (Dup)	Groundwater	11/08/2012 00:01
S54543.21	MW-12-12 (Dup)	Groundwater	11/08/2012 00:01
S54543.22	MW-12-12	Groundwater	11/08/2012 13:35



Analytical Laboratory Report

Lab Sample ID: S54543.01
Sample Tag: MW-1-12
Collected Date/Time: 11/06/2012 15:00
Matrix: Groundwater
COC Reference: 67842

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.0	IR
2	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.014	mg/L	0.005	E200.8	11/19/12 14:15	SLS	7429-90-5	
Arsenic	Not detected	mg/L	0.002	E200.8	11/19/12 14:15	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 14:15	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 14:15	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 14:15	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	11/19/12 14:15	SLS	7440-50-8	
Iron	0.05	mg/L	0.02	E200.8	11/19/12 14:15	SLS	7439-89-6	
Manganese	0.027	mg/L	0.005	E200.8	11/19/12 14:15	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 12:38	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	11/19/12 14:15	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	11/19/12 14:15	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 14:34	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 14:34	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 14:34	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 14:34	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 14:34	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 14:34	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 14:34	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 14:34	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 14:34	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 14:34	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.01 (continued)

Sample Tag: MW-1-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 14:34	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 14:34	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 14:34	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 14:34	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 14:34	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 14:34	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 14:34	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 14:34	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 14:34	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 14:34	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 14:34	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 14:34	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 14:34	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 14:34	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 14:34	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 14:34	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 14:34	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 14:34	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/15/12 19:26	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/15/12 19:26	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.01 (continued)

Sample Tag: MW-1-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/15/12 19:26	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/15/12 19:26	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/15/12 19:26	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/15/12 19:26	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/15/12 19:26	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/15/12 19:26	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.01 (continued)

Sample Tag: MW-1-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:26	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/15/12 19:26	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.02
Sample Tag: MW-2-12
Collected Date/Time: 11/06/2012 15:14
Matrix: Groundwater
COC Reference: 67842

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.0	IR
2	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.019	mg/L	0.005	E200.8	11/19/12 14:19	SLS	7429-90-5	
Arsenic	Not detected	mg/L	0.002	E200.8	11/19/12 14:19	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 14:19	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 14:19	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 14:19	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	11/19/12 14:19	SLS	7440-50-8	
Iron	0.02	mg/L	0.02	E200.8	11/19/12 14:19	SLS	7439-89-6	
Manganese	0.008	mg/L	0.005	E200.8	11/19/12 14:19	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 12:40	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	11/19/12 14:19	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	11/19/12 14:19	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 15:06	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 15:06	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 15:06	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 15:06	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 15:06	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 15:06	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 15:06	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 15:06	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 15:06	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 15:06	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.02 (continued)

Sample Tag: MW-2-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 15:06	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 15:06	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 15:06	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 15:06	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 15:06	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 15:06	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 15:06	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 15:06	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 15:06	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 15:06	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 15:06	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 15:06	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 15:06	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 15:06	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 15:06	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 15:06	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 15:06	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 15:06	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/15/12 19:48	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/15/12 19:48	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.02 (continued)

Sample Tag: MW-2-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/15/12 19:48	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/15/12 19:48	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/15/12 19:48	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/15/12 19:48	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/15/12 19:48	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/15/12 19:48	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.02 (continued)

Sample Tag: MW-2-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 19:48	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/15/12 19:48	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.03

Sample Tag: MW-1

Collected Date/Time: 11/06/2012 17:10

Matrix: Groundwater

COC Reference: 67842

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.0	IR
2	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.017	mg/L	0.005	E200.8	11/19/12 14:22	SLS	7429-90-5	
Arsenic	0.006	mg/L	0.002	E200.8	11/19/12 14:22	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 14:22	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 14:22	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 14:22	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	11/19/12 14:22	SLS	7440-50-8	
Iron	1.04	mg/L	0.02	E200.8	11/19/12 14:22	SLS	7439-89-6	
Manganese	0.582	mg/L	0.005	E200.8	11/19/12 14:22	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 12:42	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	11/19/12 14:22	SLS	7440-62-2	
Zinc	0.006	mg/L	0.005	E200.8	11/19/12 14:22	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 15:40	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 15:40	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 15:40	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 15:40	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 15:40	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 15:40	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 15:40	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 15:40	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 15:40	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 15:40	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.03 (continued)

Sample Tag: MW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 15:40	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 15:40	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 15:40	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 15:40	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 15:40	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 15:40	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 15:40	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 15:40	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 15:40	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 15:40	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 15:40	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 15:40	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 15:40	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 15:40	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 15:40	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 15:40	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 15:40	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 15:40	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/15/12 20:10	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/15/12 20:10	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.03 (continued)

Sample Tag: MW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/15/12 20:10	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/15/12 20:10	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/15/12 20:10	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/15/12 20:10	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/15/12 20:10	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/15/12 20:10	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.03 (continued)

Sample Tag: MW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:10	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/15/12 20:10	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.04
Sample Tag: MW-3-12
Collected Date/Time: 11/06/2012 11:25
Matrix: Groundwater
COC Reference: 67842

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.0	IR
2	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.026	mg/L	0.005	E200.8	11/19/12 14:25	SLS	7429-90-5	
Arsenic	0.019	mg/L	0.002	E200.8	11/19/12 14:25	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 14:25	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 14:25	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 14:25	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	11/19/12 14:25	SLS	7440-50-8	
Iron	5.00	mg/L	0.02	E200.8	11/19/12 14:25	SLS	7439-89-6	
Manganese	0.523	mg/L	0.005	E200.8	11/19/12 14:25	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 12:44	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	11/19/12 14:25	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	11/19/12 14:25	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 16:12	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 16:12	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 16:12	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 16:12	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 16:12	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 16:12	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 16:12	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 16:12	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 16:12	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 16:12	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.04 (continued)

Sample Tag: MW-3-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 16:12	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 16:12	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 16:12	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 16:12	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 16:12	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 16:12	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 16:12	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 16:12	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 16:12	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 16:12	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 16:12	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 16:12	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 16:12	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 16:12	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 16:12	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 16:12	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 16:12	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 16:12	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/15/12 20:32	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/15/12 20:32	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.04 (continued)

Sample Tag: MW-3-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/15/12 20:32	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/15/12 20:32	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/15/12 20:32	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/15/12 20:32	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/15/12 20:32	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/15/12 20:32	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.04 (continued)

Sample Tag: MW-3-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:32	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/15/12 20:32	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.05
Sample Tag: MW-6-12
Collected Date/Time: 11/06/2012 12:19
Matrix: Groundwater
COC Reference: 67842

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	5.0	IR
2	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.073	mg/L	0.005	E200.8	11/19/12 14:28	SLS	7429-90-5	
Arsenic	0.029	mg/L	0.002	E200.8	11/19/12 14:28	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 14:28	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 14:28	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 14:28	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	11/19/12 14:28	SLS	7440-50-8	
Iron	11.2	mg/L	0.02	E200.8	11/19/12 14:28	SLS	7439-89-6	
Manganese	0.878	mg/L	0.005	E200.8	11/19/12 14:28	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 12:46	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	11/19/12 14:28	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	11/19/12 14:28	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 16:46	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 16:46	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 16:46	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 16:46	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 16:46	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 16:46	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 16:46	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 16:46	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 16:46	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 16:46	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.05 (continued)

Sample Tag: MW-6-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 16:46	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 16:46	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 16:46	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 16:46	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 16:46	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 16:46	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 16:46	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 16:46	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 16:46	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 16:46	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 16:46	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 16:46	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 16:46	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 16:46	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 16:46	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 16:46	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 16:46	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 16:46	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/15/12 20:54	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/15/12 20:54	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.05 (continued)

Sample Tag: MW-6-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/15/12 20:54	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/15/12 20:54	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/15/12 20:54	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/15/12 20:54	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/15/12 20:54	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/15/12 20:54	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.05 (continued)

Sample Tag: MW-6-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 20:54	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/15/12 20:54	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.06
Sample Tag: MW-14-12
Collected Date/Time: 11/06/2012 14:32
Matrix: Groundwater
COC Reference: 67842

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	1L Amber	None	Yes	5.0	IR
2	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.016	mg/L	0.005	E200.8	11/19/12 14:31	SLS	7429-90-5	
Arsenic	Not detected	mg/L	0.002	E200.8	11/19/12 14:31	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 14:31	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 14:31	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 14:31	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	11/19/12 14:31	SLS	7440-50-8	
Iron	0.04	mg/L	0.02	E200.8	11/19/12 14:31	SLS	7439-89-6	
Manganese	0.092	mg/L	0.005	E200.8	11/19/12 14:31	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 12:48	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	11/19/12 14:31	SLS	7440-62-2	
Zinc	0.011	mg/L	0.005	E200.8	11/19/12 14:31	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 17:19	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 17:19	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 17:19	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 17:19	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 17:19	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 17:19	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 17:19	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 17:19	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 17:19	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 17:19	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.06 (continued)

Sample Tag: MW-14-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 17:19	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 17:19	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 17:19	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 17:19	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 17:19	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 17:19	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 17:19	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 17:19	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 17:19	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 17:19	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 17:19	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 17:19	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 17:19	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 17:19	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 17:19	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 17:19	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 17:19	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 17:19	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/15/12 21:16	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/15/12 21:16	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.06 (continued)

Sample Tag: MW-14-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/15/12 21:16	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/15/12 21:16	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/15/12 21:16	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/15/12 21:16	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/15/12 21:16	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/15/12 21:16	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.06 (continued)

Sample Tag: MW-14-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:16	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/15/12 21:16	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.07
Sample Tag: MW-4-12
Collected Date/Time: 11/06/2012 14:40
Matrix: Groundwater
COC Reference: 67842

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.0	IR
2	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.018	mg/L	0.005	E200.8	11/19/12 14:34	SLS	7429-90-5	
Arsenic	0.012	mg/L	0.002	E200.8	11/19/12 14:34	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 14:34	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 14:34	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 14:34	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	11/19/12 14:34	SLS	7440-50-8	
Iron	5.31	mg/L	0.02	E200.8	11/19/12 14:34	SLS	7439-89-6	
Manganese	0.351	mg/L	0.005	E200.8	11/19/12 14:34	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 12:50	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	11/19/12 14:34	SLS	7440-62-2	
Zinc	0.006	mg/L	0.005	E200.8	11/19/12 14:34	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 17:52	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 17:52	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 17:52	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 17:52	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 17:52	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 17:52	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 17:52	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 17:52	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 17:52	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 17:52	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.07 (continued)

Sample Tag: MW-4-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 17:52	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 17:52	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 17:52	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 17:52	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 17:52	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 17:52	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 17:52	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 17:52	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 17:52	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 17:52	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 17:52	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 17:52	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 17:52	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 17:52	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 17:52	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 17:52	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 17:52	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 17:52	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/15/12 21:37	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/15/12 21:37	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.07 (continued)

Sample Tag: MW-4-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/15/12 21:37	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/15/12 21:37	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/15/12 21:37	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/15/12 21:37	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/15/12 21:37	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/15/12 21:37	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.07 (continued)

Sample Tag: MW-4-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 21:37	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/15/12 21:37	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.08

Sample Tag: MW-7-12

Collected Date/Time: 11/06/2012 16:35

Matrix: Groundwater

COC Reference: 67842

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.0	IR
2	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.017	mg/L	0.005	E200.8	11/19/12 14:37	SLS	7429-90-5	
Arsenic	0.002	mg/L	0.002	E200.8	11/19/12 14:37	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 14:37	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 14:37	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 14:37	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	11/19/12 14:37	SLS	7440-50-8	
Iron	0.18	mg/L	0.02	E200.8	11/19/12 14:37	SLS	7439-89-6	
Manganese	0.128	mg/L	0.005	E200.8	11/19/12 14:37	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 12:56	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	11/19/12 14:37	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	11/19/12 14:37	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 18:25	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 18:25	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 18:25	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 18:25	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 18:25	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 18:25	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 18:25	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 18:25	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 18:25	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 18:25	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.08 (continued)

Sample Tag: MW-7-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 18:25	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 18:25	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 18:25	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 18:25	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 18:25	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 18:25	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 18:25	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 18:25	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 18:25	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 18:25	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 18:25	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 18:25	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 18:25	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 18:25	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 18:25	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 18:25	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 18:25	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 18:25	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/15/12 22:00	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/15/12 22:00	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.08 (continued)

Sample Tag: MW-7-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/15/12 22:00	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/15/12 22:00	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/15/12 22:00	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/15/12 22:00	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/15/12 22:00	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/15/12 22:00	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.08 (continued)

Sample Tag: MW-7-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/15/12 22:00	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/15/12 22:00	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.09
Sample Tag: GC-1 (Upstream)
Collected Date/Time: 11/06/2012 15:42
Matrix: Groundwater
COC Reference: 67842

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.0	IR
2	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.092	mg/L	0.005	E200.8	11/19/12 14:40	SLS	7429-90-5	
Arsenic	0.003	mg/L	0.002	E200.8	11/19/12 14:40	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 14:40	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 14:40	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 14:40	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	11/19/12 14:40	SLS	7440-50-8	
Iron	0.78	mg/L	0.02	E200.8	11/19/12 14:40	SLS	7439-89-6	
Manganese	0.095	mg/L	0.005	E200.8	11/19/12 14:40	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 12:52	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	11/19/12 14:40	SLS	7440-62-2	
Zinc	0.007	mg/L	0.005	E200.8	11/19/12 14:40	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 18:58	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 18:58	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 18:58	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 18:58	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 18:58	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 18:58	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 18:58	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 18:58	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 18:58	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 18:58	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.09 (continued)

Sample Tag: GC-1 (Upstream)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 18:58	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 18:58	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 18:58	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 18:58	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 18:58	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 18:58	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 18:58	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 18:58	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 18:58	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 18:58	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 18:58	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 18:58	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 18:58	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 18:58	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 18:58	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 18:58	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 18:58	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 18:58	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/16/12 15:00	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/16/12 15:00	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.09 (continued)

Sample Tag: GC-1 (Upstream)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/16/12 15:00	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/16/12 15:00	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/16/12 15:00	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/16/12 15:00	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/16/12 15:00	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/16/12 15:00	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.09 (continued)

Sample Tag: GC-1 (Upstream)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:00	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/16/12 15:00	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.10
Sample Tag: GC-2 (Mid)
Collected Date/Time: 11/06/2012 16:22
Matrix: Groundwater
COC Reference: 67842

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.0	IR
2	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.437	mg/L	0.005	E200.8	11/19/12 14:43	SLS	7429-90-5	
Arsenic	0.003	mg/L	0.002	E200.8	11/19/12 14:43	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 14:43	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 14:43	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 14:43	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	11/19/12 14:43	SLS	7440-50-8	
Iron	1.52	mg/L	0.02	E200.8	11/19/12 14:43	SLS	7439-89-6	
Manganese	0.125	mg/L	0.005	E200.8	11/19/12 14:43	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 12:54	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	11/19/12 14:43	SLS	7440-62-2	
Zinc	0.016	mg/L	0.005	E200.8	11/19/12 14:43	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 19:31	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 19:31	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 19:31	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 19:31	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 19:31	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 19:31	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 19:31	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 19:31	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 19:31	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 19:31	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.10 (continued)

Sample Tag: GC-2 (Mid)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 19:31	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 19:31	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 19:31	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 19:31	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 19:31	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 19:31	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 19:31	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 19:31	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 19:31	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 19:31	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 19:31	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 19:31	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 19:31	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 19:31	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 19:31	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 19:31	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 19:31	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 19:31	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/16/12 15:22	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/16/12 15:22	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.10 (continued)

Sample Tag: GC-2 (Mid)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/16/12 15:22	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/16/12 15:22	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/16/12 15:22	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/16/12 15:22	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/16/12 15:22	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/16/12 15:22	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.10 (continued)

Sample Tag: GC-2 (Mid)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:22	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/16/12 15:22	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.11
Sample Tag: GC-3 (Downstream)
Collected Date/Time: 11/06/2012 16:51
Matrix: Groundwater
COC Reference: 67842

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.0	IR
2	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.067	mg/L	0.005	E200.8	11/19/12 14:58	SLS	7429-90-5	
Arsenic	0.002	mg/L	0.002	E200.8	11/19/12 14:58	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 14:58	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 14:58	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 14:58	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	11/19/12 14:58	SLS	7440-50-8	
Iron	0.65	mg/L	0.02	E200.8	11/19/12 14:58	SLS	7439-89-6	
Manganese	0.072	mg/L	0.005	E200.8	11/19/12 14:58	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 13:06	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	11/19/12 14:58	SLS	7440-62-2	
Zinc	0.006	mg/L	0.005	E200.8	11/19/12 14:58	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 20:04	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 20:04	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 20:04	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 20:04	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 20:04	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 20:04	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 20:04	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 20:04	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 20:04	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 20:04	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.11 (continued)

Sample Tag: GC-3 (Downstream)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 20:04	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 20:04	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 20:04	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 20:04	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 20:04	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 20:04	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 20:04	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 20:04	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 20:04	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 20:04	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 20:04	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 20:04	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 20:04	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 20:04	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 20:04	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 20:04	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 20:04	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 20:04	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/16/12 15:44	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/16/12 15:44	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.11 (continued)

Sample Tag: GC-3 (Downstream)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/16/12 15:44	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/16/12 15:44	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/16/12 15:44	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/16/12 15:44	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/16/12 15:44	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/16/12 15:44	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.11 (continued)

Sample Tag: GC-3 (Downstream)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 15:44	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/16/12 15:44	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.12
Sample Tag: MW-13-12
Collected Date/Time: 11/06/2012 11:20
Matrix: Groundwater
COC Reference: 67842

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.0	IR
2	40ml Glass	HCL	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.007	mg/L	0.005	E200.8	11/19/12 15:01	SLS	7429-90-5	
Arsenic	0.003	mg/L	0.002	E200.8	11/19/12 15:01	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 15:01	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 15:01	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 15:01	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	11/19/12 15:01	SLS	7440-50-8	
Iron	1.36	mg/L	0.02	E200.8	11/19/12 15:01	SLS	7439-89-6	
Manganese	0.626	mg/L	0.005	E200.8	11/19/12 15:01	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 13:08	JRH	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	11/19/12 15:01	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	11/19/12 15:01	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 20:37	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 20:37	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 20:37	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 20:37	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 20:37	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 20:37	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 20:37	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 20:37	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 20:37	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 20:37	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.12 (continued)

Sample Tag: MW-13-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 20:37	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 20:37	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 20:37	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 20:37	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 20:37	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 20:37	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 20:37	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 20:37	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 20:37	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 20:37	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 20:37	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 20:37	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 20:37	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 20:37	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 20:37	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 20:37	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 20:37	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 20:37	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/16/12 16:06	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/16/12 16:06	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.12 (continued)

Sample Tag: MW-13-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/16/12 16:06	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/16/12 16:06	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/16/12 16:06	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/16/12 16:06	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/16/12 16:06	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/16/12 16:06	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.12 (continued)

Sample Tag: MW-13-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:06	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/16/12 16:06	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.13
Sample Tag: Trip Blank
Collected Date/Time: 11/08/2012 00:01
Matrix: Liquid
COC Reference: 67843

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
4	40ml Glass	HCL	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW8260B	11/16/12 16:28	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/16/12 16:28	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/16/12 16:28	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/16/12 16:28	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/16/12 16:28	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/16/12 16:28	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/16/12 16:28	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	100-41-4	



Analytical Laboratory Report

Lab Sample ID: S54543.13 (continued)

Sample Tag: Trip Blank

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/16/12 16:28	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:28	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/16/12 16:28	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.14
Sample Tag: MW-9-12
Collected Date/Time: 11/08/2012 11:35
Matrix: Groundwater
COC Reference: 67843

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40ml Glass	HCL	Yes	5.0	IR
2	1L Amber	None	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum, Dissolved	Not detected	mg/L	0.005	E200.8	11/19/12 15:04	SLS	7429-90-5	
Arsenic, Dissolved	0.022	mg/L	0.002	E200.8	11/19/12 15:04	SLS	7440-38-2	
Cadmium, Dissolved	Not detected	mg/L	0.0005	E200.8	11/19/12 15:04	SLS	7440-43-9	
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	11/19/12 15:04	SLS	7440-47-3	
Cobalt, Dissolved	Not detected	mg/L	0.005	E200.8	11/19/12 15:04	SLS	7440-48-4	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	11/19/12 15:04	SLS	7440-50-8	
Iron, Dissolved	3.64	mg/L	0.02	E200.8	11/19/12 15:04	SLS	7439-89-6	
Manganese, Dissolved	0.219	mg/L	0.005	E200.8	11/19/12 15:04	SLS	7439-96-5	
Mercury, Dissolved	Not detected	mg/L	0.0002	E245.1	11/16/12 13:10	JRT	7439-97-6	
Vanadium, Dissolved	Not detected	mg/L	0.004	E200.8	11/19/12 15:04	SLS	7440-62-2	
Zinc, Dissolved	Not detected	mg/L	0.005	E200.8	11/19/12 15:04	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 21:11	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 21:11	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 21:11	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 21:11	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 21:11	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 21:11	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 21:11	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 21:11	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 21:11	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 21:11	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.14 (continued)

Sample Tag: MW-9-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 21:11	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 21:11	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 21:11	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 21:11	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 21:11	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 21:11	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 21:11	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 21:11	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 21:11	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 21:11	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 21:11	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 21:11	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 21:11	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 21:11	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 21:11	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 21:11	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 21:11	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 21:11	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/19/12 16:01	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/19/12 16:01	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.14 (continued)

Sample Tag: MW-9-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/19/12 16:01	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/19/12 16:01	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/19/12 16:01	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/19/12 16:01	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/19/12 16:01	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/19/12 16:01	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.14 (continued)

Sample Tag: MW-9-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:01	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/19/12 16:01	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.15
Sample Tag: TMW-6
Collected Date/Time: 11/08/2012 13:50
Matrix: Groundwater
COC Reference: 67843

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40ml Glass	HCL	Yes	5.0	IR
2	1L Amber	None	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum, Dissolved	0.059	mg/L	0.005	E200.8	11/19/12 15:07	SLS	7429-90-5	
Arsenic, Dissolved	Not detected	mg/L	0.002	E200.8	11/19/12 15:07	SLS	7440-38-2	
Cadmium, Dissolved	0.0006	mg/L	0.0005	E200.8	11/19/12 15:07	SLS	7440-43-9	
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	11/19/12 15:07	SLS	7440-47-3	
Cobalt, Dissolved	Not detected	mg/L	0.005	E200.8	11/19/12 15:07	SLS	7440-48-4	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	11/19/12 15:07	SLS	7440-50-8	
Iron, Dissolved	0.10	mg/L	0.02	E200.8	11/19/12 15:07	SLS	7439-89-6	
Manganese, Dissolved	0.316	mg/L	0.005	E200.8	11/19/12 15:07	SLS	7439-96-5	
Mercury, Dissolved	Not detected	mg/L	0.0002	E245.1	11/16/12 13:12	JRT	7439-97-6	
Vanadium, Dissolved	Not detected	mg/L	0.004	E200.8	11/19/12 15:07	SLS	7440-62-2	
Zinc, Dissolved	0.021	mg/L	0.005	E200.8	11/19/12 15:07	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 21:43	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 21:43	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 21:43	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 21:43	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 21:43	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 21:43	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 21:43	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 21:43	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 21:43	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 21:43	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.15 (continued)

Sample Tag: TMW-6

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 21:43	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 21:43	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 21:43	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 21:43	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 21:43	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 21:43	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 21:43	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 21:43	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 21:43	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 21:43	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 21:43	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 21:43	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 21:43	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 21:43	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 21:43	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 21:43	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 21:43	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 21:43	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/19/12 16:23	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/19/12 16:23	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.15 (continued)

Sample Tag: TMW-6

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/19/12 16:23	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/19/12 16:23	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/19/12 16:23	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/19/12 16:23	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/19/12 16:23	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/19/12 16:23	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.15 (continued)

Sample Tag: TMW-6

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:23	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/19/12 16:23	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.16
Sample Tag: TMW-1
Collected Date/Time: 11/08/2012 14:30
Matrix: Groundwater
COC Reference: 67843

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40ml Glass	HCL	Yes	5.0	IR
2	1L Amber	None	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum, Dissolved	0.020	mg/L	0.005	E200.8	11/19/12 15:10	SLS	7429-90-5	
Arsenic, Dissolved	Not detected	mg/L	0.002	E200.8	11/19/12 15:10	SLS	7440-38-2	
Cadmium, Dissolved	Not detected	mg/L	0.0005	E200.8	11/19/12 15:10	SLS	7440-43-9	
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	11/19/12 15:10	SLS	7440-47-3	
Cobalt, Dissolved	Not detected	mg/L	0.005	E200.8	11/19/12 15:10	SLS	7440-48-4	
Copper, Dissolved	0.006	mg/L	0.004	E200.8	11/19/12 15:10	SLS	7440-50-8	
Iron, Dissolved	0.63	mg/L	0.02	E200.8	11/19/12 15:10	SLS	7439-89-6	
Manganese, Dissolved	0.277	mg/L	0.005	E200.8	11/19/12 15:10	SLS	7439-96-5	
Mercury, Dissolved	Not detected	mg/L	0.0002	E245.1	11/16/12 13:14	JRT	7439-97-6	
Vanadium, Dissolved	Not detected	mg/L	0.004	E200.8	11/19/12 15:10	SLS	7440-62-2	
Zinc, Dissolved	0.005	mg/L	0.005	E200.8	11/19/12 15:10	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 22:16	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 22:16	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 22:16	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 22:16	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 22:16	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 22:16	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 22:16	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 22:16	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 22:16	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 22:16	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.16 (continued)

Sample Tag: TMW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 22:16	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 22:16	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 22:16	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 22:16	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 22:16	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 22:16	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 22:16	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 22:16	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 22:16	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 22:16	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 22:16	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 22:16	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 22:16	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 22:16	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 22:16	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 22:16	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 22:16	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 22:16	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/19/12 16:45	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/19/12 16:45	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.16 (continued)

Sample Tag: TMW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/19/12 16:45	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/19/12 16:45	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/19/12 16:45	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/19/12 16:45	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/19/12 16:45	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/19/12 16:45	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.16 (continued)

Sample Tag: TMW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 16:45	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/19/12 16:45	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.17
Sample Tag: MW-5-12
Collected Date/Time: 11/08/2012 15:15
Matrix: Groundwater
COC Reference: 67843

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40ml Glass	HCL	Yes	5.0	IR
1	1L Amber	None	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum, Dissolved	0.013	mg/L	0.005	E200.8	11/19/12 15:13	SLS	7429-90-5	
Arsenic, Dissolved	Not detected	mg/L	0.002	E200.8	11/19/12 15:13	SLS	7440-38-2	
Cadmium, Dissolved	Not detected	mg/L	0.0005	E200.8	11/19/12 15:13	SLS	7440-43-9	
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	11/19/12 15:13	SLS	7440-47-3	
Cobalt, Dissolved	Not detected	mg/L	0.005	E200.8	11/19/12 15:13	SLS	7440-48-4	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	11/19/12 15:13	SLS	7440-50-8	
Iron, Dissolved	5.32	mg/L	0.02	E200.8	11/19/12 15:13	SLS	7439-89-6	
Manganese, Dissolved	1.83	mg/L	0.005	E200.8	11/19/12 15:13	SLS	7439-96-5	
Mercury, Dissolved	Not detected	mg/L	0.0002	E245.1	11/16/12 13:16	JRT	7439-97-6	
Vanadium, Dissolved	Not detected	mg/L	0.004	E200.8	11/19/12 15:13	SLS	7440-62-2	
Zinc, Dissolved	0.006	mg/L	0.005	E200.8	11/19/12 15:13	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 22:49	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 22:49	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 22:49	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 22:49	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 22:49	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 22:49	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 22:49	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 22:49	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 22:49	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 22:49	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.17 (continued)

Sample Tag: MW-5-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 22:49	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 22:49	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 22:49	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 22:49	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 22:49	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 22:49	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 22:49	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 22:49	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 22:49	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 22:49	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 22:49	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 22:49	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 22:49	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 22:49	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 22:49	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 22:49	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 22:49	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 22:49	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/19/12 17:07	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/19/12 17:07	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.17 (continued)

Sample Tag: MW-5-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/19/12 17:07	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/19/12 17:07	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/19/12 17:07	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/19/12 17:07	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/19/12 17:07	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/19/12 17:07	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.17 (continued)

Sample Tag: MW-5-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:07	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/19/12 17:07	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.18

Sample Tag: MW-2

Collected Date/Time: 11/08/2012 16:10

Matrix: Groundwater

COC Reference: 67843

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40ml Glass	HCL	Yes	5.0	IR
2	1L Amber	None	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.035	mg/L	0.005	E200.8	11/19/12 15:16	SLS	7429-90-5	
Arsenic	0.104	mg/L	0.002	E200.8	11/19/12 15:16	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 15:16	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 15:16	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 15:16	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	11/19/12 15:16	SLS	7440-50-8	
Iron	25.1	mg/L	0.02	E200.8	11/19/12 15:16	SLS	7439-89-6	
Manganese	3.27	mg/L	0.005	E200.8	11/19/12 15:16	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 13:18	JRT	7439-97-6	
Vanadium	0.006	mg/L	0.004	E200.8	11/19/12 15:16	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	11/19/12 15:16	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/19/12 23:22	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 23:22	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 23:22	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/19/12 23:22	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/19/12 23:22	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/19/12 23:22	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 23:22	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/19/12 23:22	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/19/12 23:22	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/19/12 23:22	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.18 (continued)

Sample Tag: MW-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/19/12 23:22	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/19/12 23:22	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 23:22	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 23:22	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/19/12 23:22	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/19/12 23:22	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/19/12 23:22	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 23:22	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/19/12 23:22	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/19/12 23:22	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/19/12 23:22	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 23:22	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 23:22	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/19/12 23:22	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/19/12 23:22	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/19/12 23:22	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/19/12 23:22	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/19/12 23:22	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/19/12 17:29	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/19/12 17:29	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.18 (continued)

Sample Tag: MW-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/19/12 17:29	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/19/12 17:29	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/19/12 17:29	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/19/12 17:29	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/19/12 17:29	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/19/12 17:29	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.18 (continued)

Sample Tag: MW-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:29	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/19/12 17:29	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.19
Sample Tag: Equipment Blank
Collected Date/Time: 11/08/2012 14:25
Matrix: Groundwater
COC Reference: 67843

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40ml Glass	HCL	Yes	5.0	IR
2	1L Amber	None	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.028	mg/L	0.005	E200.8	11/19/12 15:20	SLS	7429-90-5	
Arsenic	Not detected	mg/L	0.002	E200.8	11/19/12 15:20	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 15:20	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 15:20	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 15:20	SLS	7440-48-4	
Copper	0.149	mg/L	0.004	E200.8	11/19/12 15:20	SLS	7440-50-8	
Iron	0.03	mg/L	0.02	E200.8	11/19/12 15:20	SLS	7439-89-6	
Manganese	Not detected	mg/L	0.005	E200.8	11/19/12 15:20	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 13:24	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	11/19/12 15:20	SLS	7440-62-2	
Zinc	0.026	mg/L	0.005	E200.8	11/19/12 15:20	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/20/12 17:18	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/20/12 17:18	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/20/12 17:18	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/20/12 17:18	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/20/12 17:18	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/20/12 17:18	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/20/12 17:18	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/20/12 17:18	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/20/12 17:18	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/20/12 17:18	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.19 (continued)

Sample Tag: Equipment Blank

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/20/12 17:18	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/20/12 17:18	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/20/12 17:18	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/20/12 17:18	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/20/12 17:18	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/20/12 17:18	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/20/12 17:18	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/20/12 17:18	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/20/12 17:18	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/20/12 17:18	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/20/12 17:18	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/20/12 17:18	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/20/12 17:18	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/20/12 17:18	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/20/12 17:18	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/20/12 17:18	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/20/12 17:18	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/20/12 17:18	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/16/12 16:50	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/16/12 16:50	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.19 (continued)

Sample Tag: Equipment Blank

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/16/12 16:50	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/16/12 16:50	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/16/12 16:50	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/16/12 16:50	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/16/12 16:50	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/16/12 16:50	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.19 (continued)

Sample Tag: Equipment Blank

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/16/12 16:50	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/16/12 16:50	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.20
Sample Tag: MW-9-12 (Dup)
Collected Date/Time: 11/08/2012 00:01
Matrix: Groundwater
COC Reference: 67843

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40ml Glass	HCL	Yes	5.0	IR
2	1L Amber	None	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum, Dissolved	0.005	mg/L	0.005	E200.8	11/19/12 15:23	SLS	7429-90-5	
Arsenic, Dissolved	0.023	mg/L	0.002	E200.8	11/19/12 15:23	SLS	7440-38-2	
Cadmium, Dissolved	Not detected	mg/L	0.0005	E200.8	11/19/12 15:23	SLS	7440-43-9	
Chromium, Dissolved	Not detected	mg/L	0.005	E200.8	11/19/12 15:23	SLS	7440-47-3	
Cobalt, Dissolved	Not detected	mg/L	0.005	E200.8	11/19/12 15:23	SLS	7440-48-4	
Copper, Dissolved	Not detected	mg/L	0.004	E200.8	11/19/12 15:23	SLS	7440-50-8	
Iron, Dissolved	3.51	mg/L	0.02	E200.8	11/19/12 15:23	SLS	7439-89-6	
Manganese, Dissolved	0.220	mg/L	0.005	E200.8	11/19/12 15:23	SLS	7439-96-5	
Mercury, Dissolved	Not detected	mg/L	0.0002	E245.1	11/16/12 13:20	JRT	7439-97-6	
Vanadium, Dissolved	Not detected	mg/L	0.004	E200.8	11/19/12 15:23	SLS	7440-62-2	
Zinc, Dissolved	Not detected	mg/L	0.005	E200.8	11/19/12 15:23	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/20/12 17:51	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/20/12 17:51	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/20/12 17:51	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/20/12 17:51	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/20/12 17:51	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/20/12 17:51	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/20/12 17:51	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/20/12 17:51	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/20/12 17:51	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/20/12 17:51	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.20 (continued)

Sample Tag: MW-9-12 (Dup)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/20/12 17:51	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/20/12 17:51	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/20/12 17:51	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/20/12 17:51	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/20/12 17:51	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/20/12 17:51	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/20/12 17:51	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/20/12 17:51	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/20/12 17:51	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/20/12 17:51	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/20/12 17:51	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/20/12 17:51	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/20/12 17:51	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/20/12 17:51	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/20/12 17:51	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/20/12 17:51	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/20/12 17:51	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/20/12 17:51	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/19/12 17:51	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/19/12 17:51	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.20 (continued)

Sample Tag: MW-9-12 (Dup)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/19/12 17:51	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/19/12 17:51	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/19/12 17:51	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/19/12 17:51	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/19/12 17:51	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/19/12 17:51	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.20 (continued)

Sample Tag: MW-9-12 (Dup)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 17:51	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/19/12 17:51	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.21
Sample Tag: MW-12-12 (Dup)
Collected Date/Time: 11/08/2012 00:01
Matrix: Groundwater
COC Reference: 67843

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40ml Glass	HCL	Yes	5.0	IR
2	1L Amber	None	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/13/12 17:36	PL		
Mercury Digestion	Completed			E245.1	11/16/12 08:30	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.017	mg/L	0.005	E200.8	11/19/12 15:26	SLS	7429-90-5	
Arsenic	0.032	mg/L	0.002	E200.8	11/19/12 15:26	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 15:26	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 15:26	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 15:26	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	11/19/12 15:26	SLS	7440-50-8	
Iron	23.4	mg/L	0.02	E200.8	11/19/12 15:26	SLS	7439-89-6	
Manganese	4.58	mg/L	0.005	E200.8	11/19/12 15:26	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 13:22	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	11/19/12 15:26	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	11/19/12 15:26	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/20/12 18:24	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/20/12 18:24	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/20/12 18:24	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/20/12 18:24	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/20/12 18:24	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/20/12 18:24	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/20/12 18:24	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/20/12 18:24	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/20/12 18:24	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/20/12 18:24	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.21 (continued)

Sample Tag: MW-12-12 (Dup)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/20/12 18:24	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/20/12 18:24	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/20/12 18:24	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/20/12 18:24	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/20/12 18:24	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/20/12 18:24	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/20/12 18:24	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/20/12 18:24	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/20/12 18:24	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/20/12 18:24	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/20/12 18:24	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/20/12 18:24	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/20/12 18:24	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/20/12 18:24	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/20/12 18:24	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/20/12 18:24	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/20/12 18:24	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/20/12 18:24	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/19/12 18:13	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/19/12 18:13	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.21 (continued)

Sample Tag: MW-12-12 (Dup)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/19/12 18:13	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/19/12 18:13	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/19/12 18:13	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/19/12 18:13	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/19/12 18:13	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/19/12 18:13	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.21 (continued)

Sample Tag: MW-12-12 (Dup)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:13	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/19/12 18:13	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S54543.22
Sample Tag: MW-12-12
Collected Date/Time: 11/08/2012 13:35
Matrix: Groundwater
COC Reference:

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40ml Glass	HCL	Yes	5.0	IR
2	1L Amber	None	Yes	5.0	IR
1	125ml Plastic	HNO3	Yes	5.0	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	11/15/12 23:20	EMR		
Mercury Digestion	Completed			E245.1	11/16/12 11:15	JRH		
Metal Digestion	Completed			3015A	11/19/12 01:00	SLR		

Metals

Aluminum	0.013	mg/L	0.005	E200.8	11/19/12 17:48	SLS	7429-90-5	
Arsenic	0.031	mg/L	0.002	E200.8	11/19/12 16:15	SLS	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	11/19/12 16:15	SLS	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	11/19/12 16:15	SLS	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	11/19/12 16:15	SLS	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	11/19/12 16:15	SLS	7440-50-8	
Iron	25.1	mg/L	0.02	E200.8	11/19/12 16:15	SLS	7439-89-6	
Manganese	4.61	mg/L	0.005	E200.8	11/19/12 16:15	SLS	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	11/16/12 13:43	JRT	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	11/19/12 16:15	SLS	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	11/19/12 16:15	SLS	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	11/20/12 16:12	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	11/20/12 16:12	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	11/20/12 16:12	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	11/20/12 16:12	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	11/20/12 16:12	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	11/20/12 16:12	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	11/20/12 16:12	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	11/20/12 16:12	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	11/20/12 16:12	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	11/20/12 16:12	PL	95-48-7	



Analytical Laboratory Report

Lab Sample ID: S54543.22 (continued)

Sample Tag: MW-12-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	11/20/12 16:12	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	11/20/12 16:12	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/20/12 16:12	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/20/12 16:12	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	11/20/12 16:12	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	11/20/12 16:12	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	11/20/12 16:12	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	11/20/12 16:12	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	11/20/12 16:12	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	11/20/12 16:12	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	11/20/12 16:12	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	11/20/12 16:12	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	11/20/12 16:12	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	11/20/12 16:12	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	11/20/12 16:12	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	11/20/12 16:12	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	11/20/12 16:12	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	11/20/12 16:12	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	11/19/12 18:35	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	11/19/12 18:35	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	75-15-0	



Analytical Laboratory Report

Lab Sample ID: S54543.22 (continued)

Sample Tag: MW-12-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	11/19/12 18:35	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	11/19/12 18:35	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	11/19/12 18:35	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	11/19/12 18:35	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	11/19/12 18:35	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	11/19/12 18:35	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	98-06-6	



Analytical Laboratory Report

Lab Sample ID: S54543.22 (continued)

Sample Tag: MW-12-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	11/19/12 18:35	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	11/19/12 18:35	WAT	91-57-6	

2680 East Lansing Dr., East Lansing, MI 48823
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www.meritlabs.com



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C.O.C. PAGE # 2 OF 2

67843

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME BOB ZWALD		
COMPANY WILCOX		
ADDRESS 37871 INTERCHANGE DRIVE		
CITY FARMINGTON HILLS	STATE MI	ZIP CODE 48335
PHONE NO. 248 330-7844	FAX NO. 248 478-3986	P.O. NO.
E-MAIL ADDRESS Bob.zwald@wilcox		QUOTE NO.

CONTACT NAME DAVID FAVERO		☐ SAME
COMPANY RACER TRUST		
ADDRESS 2930 ECORSE RD		
CITY YPSILANTI	STATE MI	ZIP CODE 48198
PHONE NO. (313) 741-6235	E-MAIL ADDRESS dfavero@racertrust.org	

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME RACER DAVIDSON RD LANDFILL/PO133645	SAMPLER(S) - PLEASE PRINT/SIGN NAME LAURA LAMBERT/Lambert
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☐ STANDARD ☐ OTHER	
DELIVERABLES REQUIRED ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER	

MATRIX CODE:	GW=GROUNDWATER	WW=WASTEWATER	S=SOIL	L=LIQUID	SD=SOLID	
	SL=SLUDGE	DW=DRINKING WATER	O=OIL	WP=WIPE	A=AIR	W=WASTE

Containers & Preservatives

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives										Certifications			
	DATE	TIME				NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	VOC	Al, As, Mn, V	SU	Dissol	Other	Special Instructions	
54543.13			TRIP BLANK (FILLED BY LAB)		4		4							X					RACER PROPOSAL #
.14	11/8/12	11:35	MW-9-12	GW	5		2	1						X	X	X	X		100-12920-0010
.15		13:50	TW-6	GW	5		2	2	1					X	X	X	X		PROJECT # PO133645
.16		14:30	TW-1	GW	5		2	2	1					X	X	X	X		TASK #4
.17		15:15	MW-5-12	GW	4		1	2	1					X	X	X	X		
.18		16:16	MW-2	GW	5		2	2	1					X	X	X			All samples contained
.19		14:25	Equipment blank		5		2	2	1					X	X	X			on ice.
.20		—	MW-9-12 (DUP)	GW	5		2	2	1					X	X	X	X		
.21		—	MW-12-12 (DUP)	GW	5		2	2	1					X	X	X			

RELINQUISHED BY: Laura Lambert	☒ Sampler	DATE 11/8/12	TIME 17:00
SIGNATURE/ORGANIZATION WILCOX			
RELINQUISHED BY: Chith		DATE 11/9/12	TIME 12:00
SIGNATURE/ORGANIZATION			
RELINQUISHED BY:		DATE	TIME
SIGNATURE/ORGANIZATION			
RELINQUISHED BY:		DATE	TIME
SIGNATURE/ORGANIZATION			

RELINQUISHED BY: David Favero	DATE 11/9/12	TIME 14:10		
SIGNATURE/ORGANIZATION				
RELINQUISHED BY: Talbot	DATE 11-9-12	TIME 14:10		
SIGNATURE/ORGANIZATION				
SEAL NO.	SEAL INTACT ☒ YES ☐ NO	INITIALS	NOTES:	TEMP. ON ARRIVAL 5.0
SEAL NO.	SEAL INTACT ☒ YES ☐ NO	INITIALS		

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



Analytical Laboratory Report

Report ID: S56199.01(01)
Generated on 05/03/2013

Report to

Attention: Susan Graves
ERG
28003 Center Oaks Dr
Wixom, MI 48393

Phone: 248-766-1648 FAX: 248-924-3108
Email: sue.graves@ergrp.net

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:

Andy Ball (andyball@meritlabs.com)
Tabitha Faust (tfaust@meritlabs.com)

Report Summary

Lab Sample ID(s): S56199.01-S56199.16
Project: RACER Davison Rd. Landfill/ PO133645
Collected Date: 04/22/2013 - 04/23/2013
Submitted Date/Time: 04/24/2013 08:30
Sampled by: Laura Lambert
P.O. #: PO133645

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc..

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#69699), WBENC (#2005110032), Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (16 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S56199.01	D-3 East	Liquid	04/22/2013 12:08
S56199.02	MW-14-12	Groundwater	04/22/2013 12:13
S56199.03	MW-13-12	Groundwater	04/22/2013 14:05
S56199.04	D-2 (MID)	Liquid	04/22/2013 16:30
S56199.05	MW-12-12	Groundwater	04/22/2013 16:03
S56199.06	D-1 West	Liquid	04/22/2013 16:44
S56199.07	GC-1 (Upstream)	Liquid	04/22/2013 16:57
S56199.08	MW-2	Groundwater	04/22/2013 18:42
S56199.09	MW-6-12	Groundwater	04/23/2013 12:28
S56199.10	MW-5-12	Groundwater	04/23/2013 14:20
S56199.11	MW-1	Groundwater	04/23/2013 16:00
S56199.12	MW-4-04	Groundwater	04/23/2013 16:35
S56199.13	MW-2-12	Groundwater	04/23/2013 16:48
S56199.14	MW-1-12	Groundwater	04/23/2013 17:15
S56199.15	Trip Blank	Liquid	04/23/2013 00:01
S56199.16	Duplicate-2	Groundwater	04/23/2013 00:01



Analytical Laboratory Report

Lab Sample ID: S56199.01
Sample Tag: D-3 East
Collected Date/Time: 04/22/2013 12:08
Matrix: Liquid
COC Reference: 81334

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR
3	40ml Glass	HCL	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/25/13 21:16	EMR		
Mercury Digestion	Completed			E245.1	04/24/13 11:45	CCM		
Metal Digestion	Completed			3015A	05/01/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	05/01/13 10:06	WAT		

Metals

Aluminum	0.082	mg/L	0.005	E200.8	05/01/13 15:25	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:25	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:25	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:25	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:25	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:25	PER	7440-50-8
Iron	0.35	mg/L	0.02	E200.8	05/01/13 15:25	PER	7439-89-6
Manganese	0.030	mg/L	0.005	E200.8	05/01/13 15:25	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/24/13 15:26	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:25	PER	7440-62-2
Zinc	0.008	mg/L	0.005	E200.8	05/01/13 15:25	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/02/13 16:08	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 16:08	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 16:08	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/02/13 16:08	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/02/13 16:08	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/02/13 16:08	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 16:08	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/02/13 16:08	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/02/13 16:08	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56199.01 (continued)

Sample Tag: D-3 East

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/02/13 16:08	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/02/13 16:08	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/02/13 16:08	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 16:08	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 16:08	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 16:08	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 16:08	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/02/13 16:08	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 16:08	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 16:08	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/02/13 16:08	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/02/13 16:08	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 16:08	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 16:08	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 16:08	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 16:08	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/02/13 16:08	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 16:08	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/02/13 16:08	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 13:54	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 13:54	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56199.01 (continued)

Sample Tag: D-3 East

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 13:54	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 13:54	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 13:54	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 13:54	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 13:54	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 13:54	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56199.01 (continued)

Sample Tag: D-3 East

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 13:54	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 13:54	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56199.02
Sample Tag: MW-14-12
Collected Date/Time: 04/22/2013 12:13
Matrix: Groundwater
COC Reference: 81334

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR
3	40ml Glass	HCL	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/25/13 21:16	EMR		
Mercury Digestion	Completed			E245.1	04/24/13 11:45	CCM		
Metal Digestion	Completed			3015A	05/01/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	05/01/13 10:06	WAT		

Metals

Aluminum	0.008	mg/L	0.005	E200.8	05/01/13 15:32	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:32	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:32	PER	7440-43-9
Calcium	100	mg/L	1.0	E200.8	05/02/13 10:50	PER	7440-70-2
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:32	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:32	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:32	PER	7440-50-8
Iron	0.33	mg/L	0.02	E200.8	05/01/13 15:32	PER	7439-89-6
Magnesium	29.4	mg/L	0.50	E200.8	05/02/13 10:50	PER	7439-95-4
Manganese	0.110	mg/L	0.005	E200.8	05/01/13 15:32	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/24/13 15:28	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:32	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 15:32	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/02/13 16:42	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 16:42	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 16:42	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/02/13 16:42	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/02/13 16:42	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/02/13 16:42	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 16:42	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	7005-72-3



Analytical Laboratory Report

Lab Sample ID: S56199.02 (continued)

Sample Tag: MW-14-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
Chrysene	Not detected	ug/L	1	SW8270C	05/02/13 16:42	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/02/13 16:42	PL	3/4-Cresol	
o-Cresol	Not detected	ug/L	10	SW8270C	05/02/13 16:42	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/02/13 16:42	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/02/13 16:42	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 16:42	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 16:42	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 16:42	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 16:42	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/02/13 16:42	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 16:42	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 16:42	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/02/13 16:42	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/02/13 16:42	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 16:42	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 16:42	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 16:42	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 16:42	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/02/13 16:42	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 16:42	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/02/13 16:42	PL	88-06-2	

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 14:16	WAT	60-29-7	



Analytical Laboratory Report

Lab Sample ID: S56199.02 (continued)

Sample Tag: MW-14-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 14:16	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 14:16	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 14:16	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 14:16	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 14:16	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 14:16	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 14:16	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	103-65-1	



Analytical Laboratory Report

Lab Sample ID: S56199.02 (continued)

Sample Tag: MW-14-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:16	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 14:16	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56199.03
Sample Tag: MW-13-12
Collected Date/Time: 04/22/2013 14:05
Matrix: Groundwater
COC Reference: 81334

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR
3	40ml Glass	HCL	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/25/13 21:16	EMR		
Mercury Digestion	Completed			E245.1	04/24/13 11:45	CCM		
Metal Digestion	Completed			3015A	05/01/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	05/01/13 10:06	WAT		

Metals

Aluminum	0.013	mg/L	0.005	E200.8	05/01/13 15:33	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:33	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:33	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:33	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:33	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:33	PER	7440-50-8
Iron	0.44	mg/L	0.02	E200.8	05/01/13 15:33	PER	7439-89-6
Manganese	Not detected	mg/L	0.005	E200.8	05/01/13 15:33	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/24/13 15:30	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:33	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 15:33	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/02/13 17:15	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 17:15	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 17:15	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/02/13 17:15	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/02/13 17:15	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/02/13 17:15	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 17:15	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/02/13 17:15	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/02/13 17:15	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56199.03 (continued)

Sample Tag: MW-13-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/02/13 17:15	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/02/13 17:15	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/02/13 17:15	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 17:15	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 17:15	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 17:15	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 17:15	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/02/13 17:15	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 17:15	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 17:15	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/02/13 17:15	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/02/13 17:15	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 17:15	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 17:15	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 17:15	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 17:15	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/02/13 17:15	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 17:15	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/02/13 17:15	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 14:38	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 14:38	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56199.03 (continued)

Sample Tag: MW-13-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 14:38	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 14:38	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 14:38	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 14:38	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 14:38	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 14:38	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56199.03 (continued)

Sample Tag: MW-13-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 14:38	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 14:38	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56199.04
Sample Tag: D-2 (MID)
Collected Date/Time: 04/22/2013 16:30
Matrix: Liquid
COC Reference: 81334

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR
3	40ml Glass	HCL	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/25/13 21:16	EMR		
Mercury Digestion	Completed			E245.1	04/24/13 11:45	CCM		
Metal Digestion	Completed			3015A	05/01/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	05/01/13 10:06	WAT		

Metals

Aluminum	0.064	mg/L	0.005	E200.8	05/01/13 15:35	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:35	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:35	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:35	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:35	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:35	PER	7440-50-8
Iron	0.35	mg/L	0.02	E200.8	05/01/13 15:35	PER	7439-89-6
Manganese	0.055	mg/L	0.005	E200.8	05/01/13 15:35	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/24/13 15:32	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:35	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 15:35	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/02/13 17:49	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 17:49	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 17:49	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/02/13 17:49	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/02/13 17:49	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/02/13 17:49	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 17:49	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/02/13 17:49	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/02/13 17:49	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56199.04 (continued)

Sample Tag: D-2 (MID)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/02/13 17:49	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/02/13 17:49	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/02/13 17:49	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 17:49	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 17:49	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 17:49	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 17:49	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/02/13 17:49	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 17:49	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 17:49	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/02/13 17:49	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/02/13 17:49	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 17:49	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 17:49	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 17:49	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 17:49	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/02/13 17:49	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 17:49	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/02/13 17:49	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 15:00	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 15:00	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56199.04 (continued)

Sample Tag: D-2 (MID)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 15:00	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 15:00	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 15:00	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 15:00	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 15:00	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 15:00	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56199.04 (continued)

Sample Tag: D-2 (MID)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:00	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 15:00	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56199.05
Sample Tag: MW-12-12
Collected Date/Time: 04/22/2013 16:03
Matrix: Groundwater
COC Reference: 81334

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR
3	40ml Glass	HCL	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/25/13 21:16	EMR		
Mercury Digestion	Completed			E245.1	04/24/13 11:45	CCM		
Metal Digestion	Completed			3015A	05/01/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	05/01/13 10:06	WAT		

Metals

Aluminum	0.044	mg/L	0.005	E200.8	05/01/13 15:37	PER	7429-90-5
Arsenic	0.029	mg/L	0.002	E200.8	05/01/13 15:37	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:37	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:37	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:37	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:37	PER	7440-50-8
Iron	34.2	mg/L	0.02	E200.8	05/01/13 15:37	PER	7439-89-6
Manganese	5.18	mg/L	0.005	E200.8	05/01/13 15:37	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/24/13 15:34	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:37	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 15:37	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/02/13 18:23	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 18:23	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 18:23	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/02/13 18:23	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/02/13 18:23	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/02/13 18:23	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 18:23	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/02/13 18:23	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/02/13 18:23	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56199.05 (continued)

Sample Tag: MW-12-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/02/13 18:23	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/02/13 18:23	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/02/13 18:23	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 18:23	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 18:23	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 18:23	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 18:23	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/02/13 18:23	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 18:23	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 18:23	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/02/13 18:23	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/02/13 18:23	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 18:23	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 18:23	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 18:23	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 18:23	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/02/13 18:23	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 18:23	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/02/13 18:23	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 15:22	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 15:22	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56199.05 (continued)

Sample Tag: MW-12-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 15:22	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 15:22	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 15:22	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 15:22	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 15:22	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 15:22	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56199.05 (continued)

Sample Tag: MW-12-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:22	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 15:22	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56199.06
Sample Tag: D-1 West
Collected Date/Time: 04/22/2013 16:44
Matrix: Liquid
COC Reference: 81334

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR
3	40ml Glass	HCL	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/25/13 21:16	EMR		
Mercury Digestion	Completed			E245.1	04/24/13 11:45	CCM		
Metal Digestion	Completed			3015A	05/01/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	05/01/13 10:06	WAT		

Metals

Aluminum	0.068	mg/L	0.005	E200.8	05/01/13 15:39	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:39	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:39	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:39	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:39	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:39	PER	7440-50-8
Iron	0.41	mg/L	0.02	E200.8	05/01/13 15:39	PER	7439-89-6
Manganese	0.048	mg/L	0.005	E200.8	05/01/13 15:39	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/24/13 15:36	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:39	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 15:39	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/02/13 18:57	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 18:57	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 18:57	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/02/13 18:57	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/02/13 18:57	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/02/13 18:57	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 18:57	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/02/13 18:57	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/02/13 18:57	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56199.06 (continued)

Sample Tag: D-1 West

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/02/13 18:57	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/02/13 18:57	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/02/13 18:57	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 18:57	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 18:57	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 18:57	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 18:57	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/02/13 18:57	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 18:57	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 18:57	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/02/13 18:57	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/02/13 18:57	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 18:57	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 18:57	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 18:57	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 18:57	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/02/13 18:57	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 18:57	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/02/13 18:57	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 15:44	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 15:44	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56199.06 (continued)

Sample Tag: D-1 West

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 15:44	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 15:44	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 15:44	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 15:44	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 15:44	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 15:44	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56199.06 (continued)

Sample Tag: D-1 West

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 15:44	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 15:44	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56199.07
Sample Tag: GC-1 (Upstream)
Collected Date/Time: 04/22/2013 16:57
Matrix: Liquid
COC Reference: 81334

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR
3	40ml Glass	HCL	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/25/13 21:16	EMR		
Mercury Digestion	Completed			E245.1	04/24/13 11:45	CCM		
Metal Digestion	Completed			3015A	05/01/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	05/01/13 10:06	WAT		

Metals

Aluminum	0.251	mg/L	0.005	E200.8	05/01/13 15:41	PER	7429-90-5
Arsenic	0.002	mg/L	0.002	E200.8	05/01/13 15:41	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:41	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:41	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:41	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:41	PER	7440-50-8
Iron	0.78	mg/L	0.02	E200.8	05/01/13 15:41	PER	7439-89-6
Manganese	0.052	mg/L	0.005	E200.8	05/01/13 15:41	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/24/13 15:48	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:41	PER	7440-62-2
Zinc	0.008	mg/L	0.005	E200.8	05/01/13 15:41	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/02/13 19:30	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 19:30	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 19:30	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/02/13 19:30	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/02/13 19:30	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/02/13 19:30	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 19:30	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/02/13 19:30	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/02/13 19:30	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56199.07 (continued)

Sample Tag: GC-1 (Upstream)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/02/13 19:30	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/02/13 19:30	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/02/13 19:30	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 19:30	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 19:30	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 19:30	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 19:30	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/02/13 19:30	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 19:30	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 19:30	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/02/13 19:30	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/02/13 19:30	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 19:30	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 19:30	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 19:30	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 19:30	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/02/13 19:30	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 19:30	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/02/13 19:30	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 16:06	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 16:06	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56199.07 (continued)

Sample Tag: GC-1 (Upstream)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 16:06	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 16:06	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 16:06	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 16:06	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 16:06	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 16:06	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56199.07 (continued)

Sample Tag: GC-1 (Upstream)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:06	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 16:06	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56199.08
Sample Tag: MW-2
Collected Date/Time: 04/22/2013 18:42
Matrix: Groundwater
COC Reference: 81334

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR
3	40ml Glass	HCL	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/25/13 21:16	EMR		
Mercury Digestion	Completed			E245.1	04/24/13 11:45	CCM		
Metal Digestion	Completed			3015A	05/01/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	05/01/13 10:06	WAT		

Metals

Aluminum	0.009	mg/L	0.005	E200.8	05/01/13 15:43	PER	7429-90-5
Arsenic	0.015	mg/L	0.002	E200.8	05/01/13 15:43	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:43	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:43	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:43	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:43	PER	7440-50-8
Iron	16.6	mg/L	0.02	E200.8	05/01/13 15:43	PER	7439-89-6
Manganese	0.577	mg/L	0.005	E200.8	05/01/13 15:43	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/24/13 15:50	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:43	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 15:43	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/02/13 20:04	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 20:04	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 20:04	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/02/13 20:04	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/02/13 20:04	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/02/13 20:04	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 20:04	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/02/13 20:04	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/02/13 20:04	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56199.08 (continued)

Sample Tag: MW-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/02/13 20:04	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/02/13 20:04	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/02/13 20:04	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 20:04	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 20:04	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 20:04	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 20:04	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/02/13 20:04	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 20:04	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 20:04	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/02/13 20:04	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/02/13 20:04	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 20:04	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 20:04	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 20:04	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 20:04	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/02/13 20:04	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 20:04	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/02/13 20:04	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 16:28	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 16:28	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56199.08 (continued)

Sample Tag: MW-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 16:28	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 16:28	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 16:28	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 16:28	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 16:28	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 16:28	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56199.08 (continued)

Sample Tag: MW-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:28	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 16:28	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56199.09
Sample Tag: MW-6-12
Collected Date/Time: 04/23/2013 12:28
Matrix: Groundwater
COC Reference: 81334

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR
3	40ml Glass	HCL	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/25/13 21:16	EMR		
Mercury Digestion	Completed			E245.1	04/24/13 11:45	CCM		
Metal Digestion	Completed			3015A	05/01/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	05/01/13 10:06	WAT		

Metals

Aluminum	0.032	mg/L	0.005	E200.8	05/01/13 15:45	PER	7429-90-5
Arsenic	0.002	mg/L	0.002	E200.8	05/01/13 15:45	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:45	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:45	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:45	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:45	PER	7440-50-8
Iron	3.57	mg/L	0.02	E200.8	05/01/13 15:45	PER	7439-89-6
Manganese	2.27	mg/L	0.005	E200.8	05/01/13 15:45	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/24/13 16:04	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:45	PER	7440-62-2
Zinc	0.016	mg/L	0.005	E200.8	05/01/13 15:45	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/02/13 20:38	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 20:38	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 20:38	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/02/13 20:38	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/02/13 20:38	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/02/13 20:38	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 20:38	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/02/13 20:38	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/02/13 20:38	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56199.09 (continued)

Sample Tag: MW-6-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/02/13 20:38	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/02/13 20:38	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/02/13 20:38	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 20:38	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 20:38	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 20:38	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 20:38	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/02/13 20:38	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 20:38	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 20:38	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/02/13 20:38	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/02/13 20:38	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 20:38	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 20:38	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 20:38	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 20:38	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/02/13 20:38	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 20:38	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/02/13 20:38	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 16:51	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 16:51	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56199.09 (continued)

Sample Tag: MW-6-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 16:51	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 16:51	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 16:51	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 16:51	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 16:51	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 16:51	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56199.09 (continued)

Sample Tag: MW-6-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 16:51	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 16:51	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56199.10
Sample Tag: MW-5-12
Collected Date/Time: 04/23/2013 14:20
Matrix: Groundwater
COC Reference: 81334

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR
3	40ml Glass	HCL	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/25/13 21:16	EMR		
Mercury Digestion	Completed			E245.1	04/24/13 11:45	CCM		
Metal Digestion	Completed			3015A	05/01/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	05/01/13 10:06	WAT		

Metals

Aluminum	0.038	mg/L	0.005	E200.8	05/01/13 15:47	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:47	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:47	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:47	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:47	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:47	PER	7440-50-8
Iron	0.77	mg/L	0.02	E200.8	05/01/13 15:47	PER	7439-89-6
Manganese	0.596	mg/L	0.005	E200.8	05/01/13 15:47	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/24/13 15:52	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:47	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 15:47	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/02/13 21:12	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 21:12	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 21:12	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/02/13 21:12	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/02/13 21:12	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/02/13 21:12	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 21:12	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/02/13 21:12	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/02/13 21:12	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56199.10 (continued)

Sample Tag: MW-5-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/02/13 21:12	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/02/13 21:12	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/02/13 21:12	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 21:12	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 21:12	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 21:12	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 21:12	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/02/13 21:12	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 21:12	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 21:12	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/02/13 21:12	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/02/13 21:12	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 21:12	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 21:12	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 21:12	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 21:12	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/02/13 21:12	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 21:12	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/02/13 21:12	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 17:13	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 17:13	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56199.10 (continued)

Sample Tag: MW-5-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 17:13	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 17:13	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 17:13	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 17:13	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 17:13	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 17:13	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56199.10 (continued)

Sample Tag: MW-5-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:13	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 17:13	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56199.11
Sample Tag: MW-1
Collected Date/Time: 04/23/2013 16:00
Matrix: Groundwater
COC Reference: 81334

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR
3	40ml Glass	HCL	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/25/13 21:16	EMR		
Mercury Digestion	Completed			E245.1	04/24/13 11:45	CCM		
Metal Digestion	Completed			3015A	05/01/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	05/01/13 10:06	WAT		

Metals

Aluminum	0.014	mg/L	0.005	E200.8	05/01/13 15:56	PER	7429-90-5
Arsenic	0.004	mg/L	0.002	E200.8	05/01/13 15:56	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:56	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:56	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:56	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:56	PER	7440-50-8
Iron	1.59	mg/L	0.02	E200.8	05/01/13 15:56	PER	7439-89-6
Manganese	1.86	mg/L	0.005	E200.8	05/01/13 15:56	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/24/13 15:54	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:56	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 15:56	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/02/13 21:46	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 21:46	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 21:46	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/02/13 21:46	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/02/13 21:46	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/02/13 21:46	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 21:46	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/02/13 21:46	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/02/13 21:46	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56199.11 (continued)

Sample Tag: MW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/02/13 21:46	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/02/13 21:46	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/02/13 21:46	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 21:46	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 21:46	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 21:46	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 21:46	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/02/13 21:46	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 21:46	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 21:46	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/02/13 21:46	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/02/13 21:46	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 21:46	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 21:46	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 21:46	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 21:46	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/02/13 21:46	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 21:46	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/02/13 21:46	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 17:35	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 17:35	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56199.11 (continued)

Sample Tag: MW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 17:35	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 17:35	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 17:35	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 17:35	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 17:35	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 17:35	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56199.11 (continued)

Sample Tag: MW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:35	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 17:35	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56199.12
Sample Tag: MW-4-04
Collected Date/Time: 04/23/2013 16:35
Matrix: Groundwater
COC Reference: 81334

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR
3	40ml Glass	HCL	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/25/13 21:16	EMR		
Mercury Digestion	Completed			E245.1	04/24/13 11:45	CCM		
Metal Digestion	Completed			3015A	05/01/13 10:00	PER		
pH check for VOCs	>2	STD Units		N/A	05/01/13 10:06	WAT		

Metals

Aluminum	0.030	mg/L	0.005	E200.8	05/01/13 15:58	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:58	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:58	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:58	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:58	PER	7440-48-4
Copper	0.100	mg/L	0.005	E200.8	05/01/13 15:58	PER	7440-50-8
Iron	2.31	mg/L	0.02	E200.8	05/01/13 15:58	PER	7439-89-6
Manganese	0.140	mg/L	0.005	E200.8	05/01/13 15:58	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/24/13 15:56	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:58	PER	7440-62-2
Zinc	0.009	mg/L	0.005	E200.8	05/01/13 15:58	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/02/13 22:20	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 22:20	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 22:20	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/02/13 22:20	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/02/13 22:20	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/02/13 22:20	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 22:20	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/02/13 22:20	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/02/13 22:20	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56199.12 (continued)

Sample Tag: MW-4-04

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/02/13 22:20	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/02/13 22:20	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/02/13 22:20	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 22:20	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 22:20	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 22:20	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 22:20	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/02/13 22:20	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 22:20	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 22:20	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/02/13 22:20	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/02/13 22:20	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 22:20	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 22:20	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 22:20	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 22:20	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/02/13 22:20	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 22:20	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/02/13 22:20	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 17:57	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 17:57	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56199.12 (continued)

Sample Tag: MW-4-04

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 17:57	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 17:57	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 17:57	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 17:57	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 17:57	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 17:57	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56199.12 (continued)

Sample Tag: MW-4-04

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 17:57	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 17:57	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56199.13
Sample Tag: MW-2-12
Collected Date/Time: 04/23/2013 16:48
Matrix: Groundwater
COC Reference: 81333

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR
3	40ml Glass	HCL	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/25/13 21:16	EMR		
Mercury Digestion	Completed			E245.1	04/24/13 11:45	CCM		
Metal Digestion	Completed			3015A	05/01/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	05/01/13 10:06	WAT		

Metals

Aluminum	0.199	mg/L	0.005	E200.8	05/01/13 16:00	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 16:00	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 16:00	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 16:00	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 16:00	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 16:00	PER	7440-50-8
Iron	2.10	mg/L	0.02	E200.8	05/01/13 16:00	PER	7439-89-6
Manganese	0.030	mg/L	0.005	E200.8	05/01/13 16:00	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/24/13 15:58	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 16:00	PER	7440-62-2
Zinc	0.010	mg/L	0.005	E200.8	05/01/13 16:00	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/02/13 22:53	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 22:53	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 22:53	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/02/13 22:53	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/02/13 22:53	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/02/13 22:53	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 22:53	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/02/13 22:53	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/02/13 22:53	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56199.13 (continued)

Sample Tag: MW-2-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/02/13 22:53	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/02/13 22:53	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/02/13 22:53	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 22:53	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 22:53	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 22:53	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 22:53	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/02/13 22:53	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 22:53	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 22:53	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/02/13 22:53	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/02/13 22:53	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 22:53	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 22:53	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 22:53	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 22:53	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/02/13 22:53	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 22:53	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/02/13 22:53	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 18:19	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 18:19	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56199.13 (continued)

Sample Tag: MW-2-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 18:19	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 18:19	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 18:19	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 18:19	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 18:19	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 18:19	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56199.13 (continued)

Sample Tag: MW-2-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:19	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 18:19	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56199.14
Sample Tag: MW-1-12
Collected Date/Time: 04/23/2013 17:15
Matrix: Groundwater
COC Reference: 81333

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR
3	40ml Glass	HCL	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/25/13 21:16	EMR		
Mercury Digestion	Completed			E245.1	04/24/13 11:45	CCM		
Metal Digestion	Completed			3015A	05/01/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	05/01/13 10:06	WAT		

Metals

Aluminum	0.011	mg/L	0.005	E200.8	05/01/13 16:01	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 16:01	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 16:01	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 16:01	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 16:01	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 16:01	PER	7440-50-8
Iron	0.27	mg/L	0.02	E200.8	05/01/13 16:01	PER	7439-89-6
Manganese	Not detected	mg/L	0.005	E200.8	05/01/13 16:01	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/24/13 16:00	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 16:01	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 16:01	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/02/13 23:27	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 23:27	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 23:27	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/02/13 23:27	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/02/13 23:27	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/02/13 23:27	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 23:27	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/02/13 23:27	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/02/13 23:27	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56199.14 (continued)

Sample Tag: MW-1-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/02/13 23:27	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/02/13 23:27	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/02/13 23:27	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 23:27	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 23:27	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/02/13 23:27	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/02/13 23:27	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/02/13 23:27	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 23:27	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/02/13 23:27	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/02/13 23:27	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/02/13 23:27	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 23:27	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 23:27	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/02/13 23:27	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/02/13 23:27	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/02/13 23:27	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/02/13 23:27	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/02/13 23:27	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 18:41	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 18:41	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56199.14 (continued)

Sample Tag: MW-1-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 18:41	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 18:41	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 18:41	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 18:41	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 18:41	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 18:41	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56199.14 (continued)

Sample Tag: MW-1-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 18:41	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 18:41	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56199.15
Sample Tag: Trip Blank
Collected Date/Time: 04/23/2013 00:01
Matrix: Liquid
COC Reference: 81333

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	40ml Glass	HCL	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

pH check for VOCs	<2	STD Units		N/A	05/01/13 10:06	WAT		

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 19:03	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 19:03	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 19:03	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 19:03	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 19:03	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 19:03	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 19:03	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	106-93-4	



Analytical Laboratory Report

Lab Sample ID: S56199.15 (continued)

Sample Tag: Trip Blank

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 19:03	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:03	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 19:03	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56199.16
Sample Tag: Duplicate-2
Collected Date/Time: 04/23/2013 00:01
Matrix: Groundwater
COC Reference: 81333

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.6	IR
3	40ml Glass	HCL	Yes	4.6	IR
1	125ml Plastic	HNO3	Yes	4.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/25/13 21:16	EMR		
Mercury Digestion	Completed			E245.1	04/24/13 11:45	CCM		
Metal Digestion	Completed			3015A	05/01/13 10:00	PER		
pH check for VOCs	<2	STD Units		N/A	05/01/13 10:11	WAT		

Metals

Aluminum	0.310	mg/L	0.005	E200.8	05/01/13 16:03	PER	7429-90-5
Arsenic	0.002	mg/L	0.002	E200.8	05/01/13 16:03	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 16:03	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 16:03	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 16:03	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 16:03	PER	7440-50-8
Iron	3.07	mg/L	0.02	E200.8	05/01/13 16:03	PER	7439-89-6
Manganese	0.028	mg/L	0.005	E200.8	05/01/13 16:03	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/24/13 16:02	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 16:03	PER	7440-62-2
Zinc	0.016	mg/L	0.005	E200.8	05/01/13 16:03	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/03/13 00:01	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/03/13 00:01	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/03/13 00:01	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/03/13 00:01	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/03/13 00:01	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/03/13 00:01	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/03/13 00:01	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/03/13 00:01	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/03/13 00:01	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56199.16 (continued)

Sample Tag: Duplicate-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/03/13 00:01	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/03/13 00:01	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/03/13 00:01	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/03/13 00:01	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/03/13 00:01	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/03/13 00:01	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/03/13 00:01	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/03/13 00:01	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/03/13 00:01	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/03/13 00:01	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/03/13 00:01	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/03/13 00:01	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/03/13 00:01	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/03/13 00:01	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/03/13 00:01	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/03/13 00:01	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/03/13 00:01	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/03/13 00:01	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/03/13 00:01	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/30/13 19:26	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/30/13 19:26	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56199.16 (continued)

Sample Tag: Duplicate-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/30/13 19:26	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/30/13 19:26	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/30/13 19:26	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/30/13 19:26	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/30/13 19:26	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/30/13 19:26	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56199.16 (continued)

Sample Tag: Duplicate-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/30/13 19:26	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/30/13 19:26	WAT	91-57-6	



81334

INVOICE TO

CONTACT NAME DAVID FAVERO		☐ SAME	
COMPANY RACER TRUST			
ADDRESS 2930 ECORSE RD.			
CITY YPSILANTI		STATE MI	ZIP CODE 48198
PHONE NO. 217 741 6235		E-MAIL ADDRESS dfavero@racertrust.org	

Certifications

☐ OHIO VAP ☐ Drinking Water

☐ DoD ☐ NPDES

Project Locations

☐ Detroit ☐ New York

☐ Other _____

Special Instructions

Containers & Preservatives

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	VOC	SVC	Met	Met	☐ Other _____ Special Instructions
	DATE	TIME															
56199.01	4/24/13	12:08	D-3 EAST	L	6	2	3	1					✓	✓		✓	RACER PROPOSAL #
.02		12:13	MW-14-12	GW	6	2	3	1					✓	✓	✓		100-12920-0010
.03		14:05	MW-13-12	GW	6	2	3	1					✓	✓		✓	PROJECT #
.04		16:30	D-2 (MID)	L	6	2	3	1					✓	✓		✓	PO 133645
.05		16:03	MW-12-12	GW	6	2	3	1					✓	✓		✓	TASK #4
.06		16:44	D-1 WEST	L	6	2	3	1					✓	✓		✓	PLEASE PROVIDE
.07		16:57	GC-1 (UPSTREAM)	L	6	2	3	1					✓	✓		✓	TABLES COMPARABLE
.08		18:42	MW-2	GW	6	2	3	1					✓	✓		✓	TO 201 CLEANUP
.09	4/22/13	12:28	MW-6-12	FW	6	2	3	1					✓	✓		✓	CRITERIA
.10		14:20	MW-5-12	FW	6	2	3	1					✓	✓		✓	
.11		16:00	MW-1	GW	6	2	3	1					✓	✓		✓	
.12		~~16:26~~	MW-4-04	GW	6	2	3	1					✓	✓	/	✓	/

RELINQUISHED BY:		DATE		TIME	
SIGNATURE/ORGANIZATION		4-24-13		830	
RECEIVED BY:		DATE		TIME	
SIGNATURE/ORGANIZATION		4-24-13		830	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES:	TEMP. ON ARRIVAL	4.6
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS			

Rev. 5.18.12



Analytical Laboratory Report

Report ID: S56139.01(01)
Generated on 05/02/2013

Report to

Attention: Susan Graves
ERG
28003 Center Oaks Dr
Wixom, MI 48393

Phone: 248-766-1648 FAX: 248-924-3108
Email: sue.graves@ergrp.net

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:

Andy Ball (andyball@meritlabs.com)
Tabitha Faust (tfaust@meritlabs.com)

Report Summary

Lab Sample ID(s): S56139.01-S56139.07
Project: RACER Davison Rd. Landfill/ PO133645
Collected Date: 04/17/2013 - 04/18/2013
Submitted Date/Time: 04/18/2013 15:40
Sampled by: Laura Lambert
P.O. #: PO133645

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc..

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#69699), WBENC (#2005110032), Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (7 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S56139.01	MW-7-12	Groundwater	04/17/2013 16:20
S56139.02	MW-8-12	Groundwater	04/17/2013 17:50
S56139.03	Duplicate	Groundwater	04/17/2013 00:01
S56139.04	MW-11-12	Groundwater	04/18/2013 13:00
S56139.05	TW-6	Groundwater	04/18/2013 13:30
S56139.06	GC-2 Mid	Liquid	04/17/2013 16:30
S56139.07	Trip Blank	Liquid	04/18/2013 00:01



Analytical Laboratory Report

Lab Sample ID: S56139.01

Sample Tag: MW-7-12

Collected Date/Time: 04/17/2013 16:20

Matrix: Groundwater

COC Reference: 81332

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/19/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/30/13 10:50	WAT		

Metals

Aluminum	0.045	mg/L	0.005	E200.8	05/01/13 14:59	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 14:59	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 14:59	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 14:59	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 14:59	PER	7440-48-4
Copper	0.010	mg/L	0.005	E200.8	05/01/13 14:59	PER	7440-50-8
Iron	0.91	mg/L	0.02	E200.8	05/01/13 14:59	PER	7439-89-6
Manganese	Not detected	mg/L	0.005	E200.8	05/01/13 14:59	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/19/13 14:36	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 14:59	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 14:59	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 18:41	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 18:41	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 18:41	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56139.01 (continued)

Sample Tag: MW-7-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 18:41	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 18:41	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 18:41	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 18:41	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 18:41	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 18:41	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 18:41	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 18:41	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 18:41	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 18:41	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 18:41	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 18:41	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 18:41	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 18:41	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/29/13 19:36	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/29/13 19:36	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56139.01 (continued)

Sample Tag: MW-7-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/29/13 19:36	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/29/13 19:36	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/29/13 19:36	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/29/13 19:36	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/29/13 19:36	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/29/13 19:36	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56139.01 (continued)

Sample Tag: MW-7-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56139.02
Sample Tag: MW-8-12
Collected Date/Time: 04/17/2013 17:50
Matrix: Groundwater
COC Reference: 81332

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/19/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/30/13 10:50	WAT		

Metals

Aluminum	0.014	mg/L	0.005	E200.8	05/01/13 15:01	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:01	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:01	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:01	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:01	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:01	PER	7440-50-8
Iron	0.44	mg/L	0.02	E200.8	05/01/13 15:01	PER	7439-89-6
Manganese	0.047	mg/L	0.005	E200.8	05/01/13 15:01	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/19/13 14:32	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:01	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 15:01	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 19:15	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 19:15	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 19:15	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56139.02 (continued)

Sample Tag: MW-8-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 19:15	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 19:15	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 19:15	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 19:15	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 19:15	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 19:15	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 19:15	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 19:15	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 19:15	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 19:15	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 19:15	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 19:15	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 19:15	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 19:15	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/29/13 19:58	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/29/13 19:58	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56139.02 (continued)

Sample Tag: MW-8-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/29/13 19:58	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/29/13 19:58	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/29/13 19:58	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/29/13 19:58	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/29/13 19:58	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/29/13 19:58	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56139.02 (continued)

Sample Tag: MW-8-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56139.03
Sample Tag: Duplicate
Collected Date/Time: 04/17/2013 00:01
Matrix: Groundwater
COC Reference: 81332

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/19/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/30/13 10:50	WAT		

Metals

Aluminum	0.014	mg/L	0.005	E200.8	05/01/13 15:02	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:02	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:02	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:02	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:02	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:02	PER	7440-50-8
Iron	0.43	mg/L	0.02	E200.8	05/01/13 15:02	PER	7439-89-6
Manganese	0.048	mg/L	0.005	E200.8	05/01/13 15:02	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/19/13 14:34	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:02	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 15:02	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 19:48	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 19:48	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 19:48	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56139.03 (continued)

Sample Tag: Duplicate

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 19:48	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 19:48	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 19:48	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 19:48	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 19:48	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 19:48	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 19:48	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 19:48	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 19:48	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 19:48	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 19:48	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 19:48	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 19:48	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 19:48	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/29/13 20:20	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/29/13 20:20	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56139.03 (continued)

Sample Tag: Duplicate

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/29/13 20:20	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/29/13 20:20	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/29/13 20:20	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/29/13 20:20	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/29/13 20:20	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/29/13 20:20	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56139.03 (continued)

Sample Tag: Duplicate

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56139.04
Sample Tag: MW-11-12
Collected Date/Time: 04/18/2013 13:00
Matrix: Groundwater
COC Reference: 81332

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/19/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/30/13 10:50	WAT		

Metals

Aluminum	0.013	mg/L	0.005	E200.8	05/01/13 15:04	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:04	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:04	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:04	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:04	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:04	PER	7440-50-8
Iron	0.70	mg/L	0.02	E200.8	05/01/13 15:04	PER	7439-89-6
Manganese	0.247	mg/L	0.005	E200.8	05/01/13 15:04	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/19/13 14:46	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:04	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 15:04	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 20:23	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 20:23	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 20:23	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56139.04 (continued)

Sample Tag: MW-11-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 20:23	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 20:23	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 20:23	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 20:23	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 20:23	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 20:23	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 20:23	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 20:23	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 20:23	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 20:23	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 20:23	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 20:23	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 20:23	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 20:23	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/29/13 20:42	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/29/13 20:42	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56139.04 (continued)

Sample Tag: MW-11-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/29/13 20:42	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/29/13 20:42	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/29/13 20:42	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/29/13 20:42	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/29/13 20:42	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/29/13 20:42	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56139.04 (continued)

Sample Tag: MW-11-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56139.05
Sample Tag: TW-6
Collected Date/Time: 04/18/2013 13:30
Matrix: Groundwater
COC Reference: 81332

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/19/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/30/13 10:50	WAT		

Metals

Aluminum	0.059	mg/L	0.005	E200.8	05/01/13 15:06	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:06	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:06	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:06	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:06	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:06	PER	7440-50-8
Iron	1.17	mg/L	0.02	E200.8	05/01/13 15:06	PER	7439-89-6
Manganese	0.462	mg/L	0.005	E200.8	05/01/13 15:06	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/19/13 14:48	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:06	PER	7440-62-2
Zinc	0.036	mg/L	0.005	E200.8	05/01/13 15:06	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 20:56	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 20:56	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 20:56	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56139.05 (continued)

Sample Tag: TW-6

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 20:56	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 20:56	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 20:56	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 20:56	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 20:56	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 20:56	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 20:56	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 20:56	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 20:56	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 20:56	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 20:56	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 20:56	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 20:56	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 20:56	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/29/13 21:04	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/29/13 21:04	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56139.05 (continued)

Sample Tag: TW-6

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/29/13 21:04	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/29/13 21:04	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/29/13 21:04	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/29/13 21:04	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/29/13 21:04	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/29/13 21:04	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56139.05 (continued)

Sample Tag: TW-6

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56139.06
Sample Tag: GC-2 Mid
Collected Date/Time: 04/17/2013 16:30
Matrix: Liquid
COC Reference: 81332

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/19/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/30/13 10:50	WAT		

Metals

Aluminum	0.178	mg/L	0.005	E200.8	05/01/13 15:10	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:10	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:10	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:10	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:10	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:10	PER	7440-50-8
Iron	0.80	mg/L	0.02	E200.8	05/01/13 15:10	PER	7439-89-6
Manganese	0.050	mg/L	0.005	E200.8	05/01/13 15:10	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/19/13 14:50	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:10	PER	7440-62-2
Zinc	0.008	mg/L	0.005	E200.8	05/01/13 15:10	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 21:30	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 21:30	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 21:30	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56139.06 (continued)

Sample Tag: GC-2 Mid

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 21:30	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 21:30	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 21:30	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 21:30	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 21:30	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 21:30	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 21:30	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 21:30	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 21:30	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 21:30	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 21:30	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 21:30	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 21:30	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 21:30	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/29/13 21:26	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/29/13 21:26	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56139.06 (continued)

Sample Tag: GC-2 Mid

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/29/13 21:26	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/29/13 21:26	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/29/13 21:26	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/29/13 21:26	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/29/13 21:26	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/29/13 21:26	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56139.06 (continued)

Sample Tag: GC-2 Mid

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56139.07
Sample Tag: Trip Blank
Collected Date/Time: 04/18/2013 00:01
Matrix: Liquid
COC Reference: 81332

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

pH check for VOCs	<2	STD Units		N/A	04/30/13 10:50	WAT		

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW8260B	04/29/13 21:48	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/29/13 21:48	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/29/13 21:48	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/29/13 21:48	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/29/13 21:48	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/29/13 21:48	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/29/13 21:48	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	106-93-4	



Analytical Laboratory Report

Lab Sample ID: S56139.07 (continued)

Sample Tag: Trip Blank

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/29/13 21:48	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	91-57-6	



Analytical Laboratory Report

Report ID: S56120.01(01)
Generated on 05/02/2013

Report to

Attention: Susan Graves
ERG
280003 Center Oaks Dr
Wixom, MI 48393

Phone: 248-766-1648 FAX: 248-924-3108
Email: sue.graves@ergrp.net

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:

Andy Ball (andyball@meritlabs.com)
Tabitha Faust (tfaust@meritlabs.com)

Report Summary

Lab Sample ID(s): S56120.01-S56120.07
Project: RACER Davison Rd. Landfill/ PO133645
Collected Date: 04/16/2013 - 04/17/2013
Submitted Date/Time: 04/17/2013 16:00
Sampled by: Laura Lambert
P.O. #: PO133645

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc..

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#69699), WBENC (#2005110032), Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (7 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S56120.01	MW-9-12	Groundwater	04/16/2013 15:55
S56120.02	MW-10-12	Groundwater	04/16/2013 18:00
S56120.03	MW-4-12	Groundwater	04/17/2013 11:35
S56120.04	TW-1	Groundwater	04/17/2013 12:15
S56120.05	MW-3-12	Groundwater	04/17/2013 13:20
S56120.06	GC-3 (Downstream)	Groundwater	04/17/2013 14:00
S56120.07	Trip Blank	Groundwater	04/17/2013 00:01



Analytical Laboratory Report

Lab Sample ID: S56120.01
Sample Tag: MW-9-12
Collected Date/Time: 04/16/2013 15:55
Matrix: Groundwater
COC Reference: 81331

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
3	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/18/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/29/13 10:45	WAT		

Metals

Aluminum	0.014	mg/L	0.005	E200.8	05/01/13 13:32	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 13:32	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 13:32	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 13:32	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 13:32	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 13:32	PER	7440-50-8
Iron	1.00	mg/L	0.02	E200.8	05/01/13 13:32	PER	7439-89-6
Manganese	0.256	mg/L	0.005	E200.8	05/01/13 13:32	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/18/13 15:15	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 13:32	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 13:32	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 14:08	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 14:08	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 14:08	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56120.01 (continued)

Sample Tag: MW-9-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 14:08	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 14:08	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 14:08	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 14:08	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 14:08	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 14:08	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 14:08	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 14:08	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 14:08	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 14:08	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 14:08	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 14:08	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 14:08	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 14:08	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/27/13 20:15	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/27/13 20:15	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56120.01 (continued)

Sample Tag: MW-9-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/27/13 20:15	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/27/13 20:15	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/27/13 20:15	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/27/13 20:15	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/27/13 20:15	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/27/13 20:15	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56120.01 (continued)

Sample Tag: MW-9-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56120.02
Sample Tag: MW-10-12
Collected Date/Time: 04/16/2013 18:00
Matrix: Groundwater
COC Reference: 81331

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
3	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/18/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/29/13 10:45	WAT		

Metals

Aluminum	0.012	mg/L	0.005	E200.8	05/01/13 13:40	PER	7429-90-5
Arsenic	0.019	mg/L	0.002	E200.8	05/01/13 13:40	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 13:40	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 13:40	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 13:40	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 13:40	PER	7440-50-8
Iron	11.6	mg/L	0.02	E200.8	05/01/13 13:40	PER	7439-89-6
Manganese	2.17	mg/L	0.005	E200.8	05/01/13 13:40	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/18/13 15:00	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 13:40	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 13:40	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 14:43	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 14:43	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 14:43	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56120.02 (continued)

Sample Tag: MW-10-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 14:43	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 14:43	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 14:43	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 14:43	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 14:43	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 14:43	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 14:43	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 14:43	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 14:43	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 14:43	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 14:43	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 14:43	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 14:43	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 14:43	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/27/13 20:37	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/27/13 20:37	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56120.02 (continued)

Sample Tag: MW-10-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/27/13 20:37	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/27/13 20:37	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/27/13 20:37	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/27/13 20:37	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/27/13 20:37	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/27/13 20:37	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56120.02 (continued)

Sample Tag: MW-10-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56120.03
Sample Tag: MW-4-12
Collected Date/Time: 04/17/2013 11:35
Matrix: Groundwater
COC Reference: 81331

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
3	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/18/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/29/13 10:45	WAT		

Metals

Aluminum	0.019	mg/L	0.005	E200.8	05/01/13 13:41	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 13:41	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 13:41	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 13:41	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 13:41	PER	7440-48-4
Copper	0.006	mg/L	0.005	E200.8	05/01/13 13:41	PER	7440-50-8
Iron	0.64	mg/L	0.02	E200.8	05/01/13 13:41	PER	7439-89-6
Manganese	0.164	mg/L	0.005	E200.8	05/01/13 13:41	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/18/13 15:02	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 13:41	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 13:41	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 15:17	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 15:17	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 15:17	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56120.03 (continued)

Sample Tag: MW-4-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 15:17	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 15:17	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 15:17	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 15:17	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 15:17	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 15:17	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 15:17	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 15:17	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 15:17	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 15:17	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 15:17	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 15:17	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 15:17	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 15:17	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/27/13 20:59	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/27/13 20:59	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56120.03 (continued)

Sample Tag: MW-4-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/27/13 20:59	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/27/13 20:59	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/27/13 20:59	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/27/13 20:59	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/27/13 20:59	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/27/13 20:59	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56120.03 (continued)

Sample Tag: MW-4-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56120.04
Sample Tag: TW-1
Collected Date/Time: 04/17/2013 12:15
Matrix: Groundwater
COC Reference: 81331

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
3	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/18/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/29/13 10:45	WAT		

Metals

Aluminum	0.014	mg/L	0.005	E200.8	05/01/13 13:43	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 13:43	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 13:43	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 13:43	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 13:43	PER	7440-48-4
Copper	0.005	mg/L	0.005	E200.8	05/01/13 13:43	PER	7440-50-8
Iron	0.96	mg/L	0.02	E200.8	05/01/13 13:43	PER	7439-89-6
Manganese	0.005	mg/L	0.005	E200.8	05/01/13 13:43	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/18/13 15:04	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 13:43	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 13:43	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 15:51	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 15:51	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 15:51	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56120.04 (continued)

Sample Tag: TW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 15:51	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 15:51	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 15:51	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 15:51	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 15:51	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 15:51	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 15:51	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 15:51	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 15:51	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 15:51	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 15:51	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 15:51	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 15:51	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 15:51	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/27/13 21:21	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/27/13 21:21	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56120.04 (continued)

Sample Tag: TW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/27/13 21:21	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/27/13 21:21	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/27/13 21:21	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/27/13 21:21	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/27/13 21:21	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/27/13 21:21	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56120.04 (continued)

Sample Tag: TW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56120.05
Sample Tag: MW-3-12
Collected Date/Time: 04/17/2013 13:20
Matrix: Groundwater
COC Reference: 81331

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
3	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/18/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/29/13 10:45	WAT		

Metals

Aluminum	0.056	mg/L	0.005	E200.8	05/01/13 13:45	PER	7429-90-5
Arsenic	0.002	mg/L	0.002	E200.8	05/01/13 13:45	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 13:45	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 13:45	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 13:45	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 13:45	PER	7440-50-8
Iron	0.41	mg/L	0.02	E200.8	05/01/13 13:45	PER	7439-89-6
Manganese	0.073	mg/L	0.005	E200.8	05/01/13 13:45	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/18/13 15:06	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 13:45	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 13:45	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 16:25	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 16:25	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 16:25	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56120.05 (continued)

Sample Tag: MW-3-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 16:25	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 16:25	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 16:25	PL	132-64-9	
di-n-Butyl phthalate	5	ug/L	5	SW8270C	05/01/13 16:25	PL	84-74-2	B
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 16:25	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 16:25	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 16:25	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 16:25	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 16:25	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 16:25	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 16:25	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 16:25	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 16:25	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 16:25	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 16:25	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/27/13 21:43	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/27/13 21:43	WAT	67-64-1	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S56120.05 (continued)

Sample Tag: MW-3-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methyl iodide	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/27/13 21:43	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/27/13 21:43	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/27/13 21:43	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/27/13 21:43	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/27/13 21:43	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/27/13 21:43	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	108-86-1	



Analytical Laboratory Report

Lab Sample ID: S56120.05 (continued)

Sample Tag: MW-3-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56120.06
Sample Tag: GC-3 (Downstream)
Collected Date/Time: 04/17/2013 14:00
Matrix: Groundwater
COC Reference: 81331

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
3	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/18/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/29/13 10:45	WAT		

Metals

Aluminum	0.312	mg/L	0.005	E200.8	05/01/13 14:04	PER	7429-90-5
Arsenic	0.003	mg/L	0.002	E200.8	05/01/13 14:04	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 14:04	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 14:04	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 14:04	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 14:04	PER	7440-50-8
Iron	1.23	mg/L	0.02	E200.8	05/01/13 14:04	PER	7439-89-6
Manganese	0.076	mg/L	0.005	E200.8	05/01/13 14:04	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/18/13 15:08	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 14:04	PER	7440-62-2
Zinc	0.021	mg/L	0.005	E200.8	05/01/13 14:04	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 16:59	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 16:59	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 16:59	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56120.06 (continued)

Sample Tag: GC-3 (Downstream)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 16:59	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 16:59	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 16:59	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 16:59	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 16:59	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 16:59	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 16:59	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 16:59	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 16:59	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 16:59	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 16:59	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 16:59	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 16:59	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 16:59	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/27/13 22:05	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/27/13 22:05	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56120.06 (continued)

Sample Tag: GC-3 (Downstream)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/27/13 22:05	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/27/13 22:05	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/27/13 22:05	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/27/13 22:05	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/27/13 22:05	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/27/13 22:05	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56120.06 (continued)

Sample Tag: GC-3 (Downstream)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56120.07
Sample Tag: Trip Blank
Collected Date/Time: 04/17/2013 00:01
Matrix: Groundwater
COC Reference: 81331

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

pH check for VOCs	<2	STD Units		N/A	04/29/13 10:45	WAT		

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW8260B	04/27/13 22:27	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/27/13 22:27	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/27/13 22:27	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/27/13 22:27	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/27/13 22:27	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/27/13 22:27	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/27/13 22:27	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	106-93-4	



Analytical Laboratory Report

Lab Sample ID: S56120.07 (continued)

Sample Tag: Trip Blank

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/27/13 22:27	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	91-57-6	



2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # _____ OF _____

81331

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME				SUSAN GRAVES							
COMPANY				E.R.G.							
ADDRESS								28003 CENTER OAKS DRIVE			
CITY						STATE		ZIP CODE			
WIXOM						MI		48393			
PHONE NO.				FAX NO.				P.O. NO.			
(248) 766-1648				(248) 924-3108				PO133645			
E-MAIL ADDRESS						QUOTE NO.					
sue.graves@ergrp.net											

CONTACT NAME		DAVID FAVERO		☐ SAME	
COMPANY		RACER TRUST			
ADDRESS		2930 ECORSE RD.			
CITY		YPSILANTI		STATE	MI
				ZIP CODE	48198
PHONE NO.		E-MAIL ADDRESS			
(517) 741-6235		dfavero@racertrust.org			

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME: PACER DAVIS ON RD. LANDFILL / PO133645, LANFA LAMBERT / *lanfa*

SAMPLER(S) - PLEASE PRINT/SIGN NAME: *lanfa*

TURNAROUND TIME REQUIRED: ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED: ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX	GW=GROUNDWATER	WW=WASTEWATER	S=SOIL	L=LIQUID	SD=SOLID
CODE:	SL=SLUDGE	DW=DRINKING WATER	O=OIL	WP=WIPE	A=AIR
					W=WASTE

Containers & Preservatives

[illegible][illegible][illegible]

Certifications

☐ OHIO VAP ☐ Drinking Water

☐ DoD ☐ NPDES

Project Locations

☐ Detroit ☐ New York

☐ Other _____

Special Instructions

RACER PROPOSAL #
100-12920-0010
PROJECT #
P0133645
TASK # 4
PROVIDE TABLES
COMPARABLE TO
201 CLEANUP
CRITERIA
ALL SAMPLES
CONTAINED ON ICE

RELINQUISHED BY: <i>Carla Lambert</i>	☒ Sampler	DATE	TIME
SIGNATURE/ORGANIZATION <i>ERG CARLA LAMBERT</i>		<i>4/17/13</i>	<i>15:00</i>
RECEIVED BY: <i>[Signature]</i>		DATE	TIME
SIGNATURE/ORGANIZATION		<i>4/17/13</i>	<i>5:00</i>
RELINQUISHED BY:		DATE	TIME
SIGNATURE/ORGANIZATION			
RECEIVED BY:		DATE	TIME
SIGNATURE/ORGANIZATION			

RELINQUISHED BY:		DATE		TIME	
SIGNATURE/ORGANIZATION		4-17-13		1600	
RECEIVED BY:		DATE		TIME	
SIGNATURE/ORGANIZATION		4-17-13		1600	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES: TEMP. ON ARRIVAL 48		
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS			

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME SUE GRAVES			
COMPANY ERG			
ADDRESS 28003 CENTER OAKS CT. STE. 106			
CITY WIXOM		STATE MI	ZIP CODE 48373
PHONE NO. 248-766-1648		FAX NO. 248.724.3108	P.O. NO.
E-MAIL ADDRESS sue.graves@ergp.net			QUOTE NO.

CONTACT NAME DAVID FAVERO		☐ SAME	
COMPANY			
ADDRESS 2930 ELISE RD			
CITY VPSILANTI		STATE MI	ZIP CODE 48198
PHONE NO. 217.741.6235		E-MAIL ADDRESS DAVID.FAVERO@RACETRUST.ORG	

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME RACER: DAVISON RD. LANDFILL	SAMPLER(S) - PLEASE PRINT/SIGN NAME LAURA LAMBERT CONSULT Susan Grube

TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER _____

DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____

MATRIX	GW=GROUNDWATER	WW=WASTEWATER	S=SOIL	L=LIQUID	SD=SOLID	# Containers & Preservatives
CODE:	SL=SLUDGE	DW=DRINKING WATER	O=OIL	WP=WIPE	A=AIR W=WASTE	

[illegible]

RELINQUISHED BY: <i>Ch. Cantor</i>	☒ Sampler	DATE	TIME
SIGNATURE/ORGANIZATION <i>ERR</i>		7/23/13	14:50
RECEIVED BY: <i>Ch. Cantor</i>		DATE	TIME
SIGNATURE/ORGANIZATION		7-23-13	1750
RELINQUISHED BY:		DATE	TIME
SIGNATURE/ORGANIZATION			
RECEIVED BY:		DATE	TIME
SIGNATURE/ORGANIZATION			

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 7-23-13		TIME 1545	
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 7-23-13		TIME 1545	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES:	TEMP. ON ARRIVAL	5.4
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS			



Analytical Laboratory Report

Report ID: S56139.01(01)
Generated on 05/02/2013

Report to

Attention: Susan Graves
ERG
28003 Center Oaks Dr
Wixom, MI 48393

Phone: 248-766-1648 FAX: 248-924-3108
Email: sue.graves@ergrp.net

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:

Andy Ball (andyball@meritlabs.com)
Tabitha Faust (tfaust@meritlabs.com)

Report Summary

Lab Sample ID(s): S56139.01-S56139.07
Project: RACER Davison Rd. Landfill/ PO133645
Collected Date: 04/17/2013 - 04/18/2013
Submitted Date/Time: 04/18/2013 15:40
Sampled by: Laura Lambert
P.O. #: PO133645

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc..

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#69699), WBENC (#2005110032), Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (7 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S56139.01	MW-7-12	Groundwater	04/17/2013 16:20
S56139.02	MW-8-12	Groundwater	04/17/2013 17:50
S56139.03	Duplicate	Groundwater	04/17/2013 00:01
S56139.04	MW-11-12	Groundwater	04/18/2013 13:00
S56139.05	TW-6	Groundwater	04/18/2013 13:30
S56139.06	GC-2 Mid	Liquid	04/17/2013 16:30
S56139.07	Trip Blank	Liquid	04/18/2013 00:01



Analytical Laboratory Report

Lab Sample ID: S56139.01
Sample Tag: MW-7-12
Collected Date/Time: 04/17/2013 16:20
Matrix: Groundwater
COC Reference: 81332

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/19/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/30/13 10:50	WAT		

Metals

Aluminum	0.045	mg/L	0.005	E200.8	05/01/13 14:59	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 14:59	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 14:59	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 14:59	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 14:59	PER	7440-48-4
Copper	0.010	mg/L	0.005	E200.8	05/01/13 14:59	PER	7440-50-8
Iron	0.91	mg/L	0.02	E200.8	05/01/13 14:59	PER	7439-89-6
Manganese	Not detected	mg/L	0.005	E200.8	05/01/13 14:59	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/19/13 14:36	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 14:59	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 14:59	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 18:41	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 18:41	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 18:41	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56139.01 (continued)

Sample Tag: MW-7-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 18:41	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 18:41	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 18:41	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 18:41	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 18:41	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 18:41	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 18:41	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 18:41	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 18:41	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 18:41	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 18:41	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 18:41	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 18:41	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 18:41	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 18:41	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 18:41	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/29/13 19:36	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/29/13 19:36	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56139.01 (continued)

Sample Tag: MW-7-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/29/13 19:36	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/29/13 19:36	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/29/13 19:36	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/29/13 19:36	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/29/13 19:36	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/29/13 19:36	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56139.01 (continued)

Sample Tag: MW-7-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:36	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/29/13 19:36	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56139.02
Sample Tag: MW-8-12
Collected Date/Time: 04/17/2013 17:50
Matrix: Groundwater
COC Reference: 81332

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/19/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/30/13 10:50	WAT		

Metals

Aluminum	0.014	mg/L	0.005	E200.8	05/01/13 15:01	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:01	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:01	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:01	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:01	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:01	PER	7440-50-8
Iron	0.44	mg/L	0.02	E200.8	05/01/13 15:01	PER	7439-89-6
Manganese	0.047	mg/L	0.005	E200.8	05/01/13 15:01	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/19/13 14:32	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:01	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 15:01	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 19:15	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 19:15	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 19:15	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56139.02 (continued)

Sample Tag: MW-8-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 19:15	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 19:15	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 19:15	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 19:15	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 19:15	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 19:15	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 19:15	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 19:15	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 19:15	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 19:15	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 19:15	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 19:15	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 19:15	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 19:15	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 19:15	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 19:15	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/29/13 19:58	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/29/13 19:58	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56139.02 (continued)

Sample Tag: MW-8-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/29/13 19:58	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/29/13 19:58	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/29/13 19:58	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/29/13 19:58	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/29/13 19:58	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/29/13 19:58	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56139.02 (continued)

Sample Tag: MW-8-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 19:58	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/29/13 19:58	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56139.03
Sample Tag: Duplicate
Collected Date/Time: 04/17/2013 00:01
Matrix: Groundwater
COC Reference: 81332

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/19/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/30/13 10:50	WAT		

Metals

Aluminum	0.014	mg/L	0.005	E200.8	05/01/13 15:02	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:02	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:02	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:02	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:02	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:02	PER	7440-50-8
Iron	0.43	mg/L	0.02	E200.8	05/01/13 15:02	PER	7439-89-6
Manganese	0.048	mg/L	0.005	E200.8	05/01/13 15:02	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/19/13 14:34	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:02	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 15:02	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 19:48	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 19:48	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 19:48	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56139.03 (continued)

Sample Tag: Duplicate

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 19:48	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 19:48	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 19:48	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 19:48	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 19:48	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 19:48	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 19:48	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 19:48	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 19:48	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 19:48	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 19:48	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 19:48	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 19:48	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 19:48	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 19:48	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 19:48	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/29/13 20:20	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/29/13 20:20	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56139.03 (continued)

Sample Tag: Duplicate

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/29/13 20:20	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/29/13 20:20	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/29/13 20:20	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/29/13 20:20	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/29/13 20:20	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/29/13 20:20	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56139.03 (continued)

Sample Tag: Duplicate

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:20	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/29/13 20:20	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56139.04
Sample Tag: MW-11-12
Collected Date/Time: 04/18/2013 13:00
Matrix: Groundwater
COC Reference: 81332

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/19/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/30/13 10:50	WAT		

Metals

Aluminum	0.013	mg/L	0.005	E200.8	05/01/13 15:04	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:04	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:04	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:04	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:04	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:04	PER	7440-50-8
Iron	0.70	mg/L	0.02	E200.8	05/01/13 15:04	PER	7439-89-6
Manganese	0.247	mg/L	0.005	E200.8	05/01/13 15:04	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/19/13 14:46	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:04	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 15:04	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 20:23	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 20:23	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 20:23	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56139.04 (continued)

Sample Tag: MW-11-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 20:23	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 20:23	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 20:23	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 20:23	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 20:23	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 20:23	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 20:23	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 20:23	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 20:23	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 20:23	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 20:23	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 20:23	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 20:23	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 20:23	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 20:23	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 20:23	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/29/13 20:42	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/29/13 20:42	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56139.04 (continued)

Sample Tag: MW-11-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/29/13 20:42	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/29/13 20:42	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/29/13 20:42	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/29/13 20:42	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/29/13 20:42	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/29/13 20:42	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56139.04 (continued)

Sample Tag: MW-11-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 20:42	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/29/13 20:42	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56139.05
Sample Tag: TW-6
Collected Date/Time: 04/18/2013 13:30
Matrix: Groundwater
COC Reference: 81332

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/19/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/30/13 10:50	WAT		

Metals

Aluminum	0.059	mg/L	0.005	E200.8	05/01/13 15:06	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:06	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:06	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:06	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:06	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:06	PER	7440-50-8
Iron	1.17	mg/L	0.02	E200.8	05/01/13 15:06	PER	7439-89-6
Manganese	0.462	mg/L	0.005	E200.8	05/01/13 15:06	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/19/13 14:48	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:06	PER	7440-62-2
Zinc	0.036	mg/L	0.005	E200.8	05/01/13 15:06	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 20:56	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 20:56	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 20:56	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56139.05 (continued)

Sample Tag: TW-6

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 20:56	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 20:56	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 20:56	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 20:56	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 20:56	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 20:56	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 20:56	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 20:56	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 20:56	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 20:56	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 20:56	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 20:56	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 20:56	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 20:56	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 20:56	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 20:56	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/29/13 21:04	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/29/13 21:04	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56139.05 (continued)

Sample Tag: TW-6

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/29/13 21:04	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/29/13 21:04	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/29/13 21:04	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/29/13 21:04	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/29/13 21:04	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/29/13 21:04	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56139.05 (continued)

Sample Tag: TW-6

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:04	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/29/13 21:04	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56139.06
Sample Tag: GC-2 Mid
Collected Date/Time: 04/17/2013 16:30
Matrix: Liquid
COC Reference: 81332

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.7	IR
3	40ml Glass	HCL	Yes	4.7	IR
1	125ml Plastic	HNO3	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/19/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/30/13 10:50	WAT		

Metals

Aluminum	0.178	mg/L	0.005	E200.8	05/01/13 15:10	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 15:10	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 15:10	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 15:10	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 15:10	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 15:10	PER	7440-50-8
Iron	0.80	mg/L	0.02	E200.8	05/01/13 15:10	PER	7439-89-6
Manganese	0.050	mg/L	0.005	E200.8	05/01/13 15:10	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/19/13 14:50	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 15:10	PER	7440-62-2
Zinc	0.008	mg/L	0.005	E200.8	05/01/13 15:10	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 21:30	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 21:30	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 21:30	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56139.06 (continued)

Sample Tag: GC-2 Mid

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 21:30	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 21:30	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 21:30	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 21:30	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 21:30	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 21:30	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 21:30	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 21:30	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 21:30	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 21:30	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 21:30	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 21:30	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 21:30	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 21:30	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 21:30	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 21:30	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/29/13 21:26	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/29/13 21:26	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56139.06 (continued)

Sample Tag: GC-2 Mid

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/29/13 21:26	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/29/13 21:26	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/29/13 21:26	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/29/13 21:26	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/29/13 21:26	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/29/13 21:26	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56139.06 (continued)

Sample Tag: GC-2 Mid

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:26	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/29/13 21:26	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56139.07
Sample Tag: Trip Blank
Collected Date/Time: 04/18/2013 00:01
Matrix: Liquid
COC Reference: 81332

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	4.7	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

pH check for VOCs	<2	STD Units		N/A	04/30/13 10:50	WAT		

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW8260B	04/29/13 21:48	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/29/13 21:48	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/29/13 21:48	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/29/13 21:48	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/29/13 21:48	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/29/13 21:48	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/29/13 21:48	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	106-93-4	



Analytical Laboratory Report

Lab Sample ID: S56139.07 (continued)

Sample Tag: Trip Blank

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/29/13 21:48	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/29/13 21:48	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/29/13 21:48	WAT	91-57-6	



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C.O.C. PAGE # _____ OF _____

81332

INVOICE TO

CONTACT NAME SUSAN GRAVES			
COMPANY E.R.G.			
ADDRESS 28003 CENTER OAKS DRIVE			
CITY WIXOM		STATE MI	ZIP CODE 48393
PHONE NO. (248) 766-1648		FAX NO. (248) 924-3108	
E-MAIL ADDRESS sue.graves@ergrp.net		P.O. NO. PO133645	
		QUOTE NO.	

CONTACT NAME DAVID FAVERO		☐ SAME	
COMPANY RACER TRUST			
ADDRESS 2930 ECORSE RD.			
CITY YPSILANTI		STATE MI	ZIP CODE 48198
PHONE NO. (217) 741-6235		E-MAIL ADDRESS dfavero@racertrust.org	

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME SACRE DIVISION RD. LANDFILL / PO133645	SAMPLER(S) - PLEASE PRINT/SIGN NAME LAURA CAMERON / [Signature]
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER _____	
DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____	

MATRIX	GW=GROUNDWATER	WW=WASTEWATER	S=SOIL	L=LIQUID	SD=SOLID
CODE:	SL=SLUDGE	DW=DRINKING WATER	O=OIL	WP=WIPE	A=AIR W=WASTE

[illegible][illegible]

RELINQUISHED BY: SIGNATURE/ORGANIZATION	<i>[Signature]</i> LIVERMOUTH ECG	☒ Sampler	DATE 7/15/13	TIME 10:45
RECEIVED BY: SIGNATURE/ORGANIZATION	<i>[Signature]</i>		DATE 7-18-13	TIME 1:44
RELINQUISHED BY: SIGNATURE/ORGANIZATION			DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION			DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 4-18-13		TIME 1545	
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 4-18-13		TIME 1540	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES: TEMP. ON ARRIVAL 4.7		
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS			

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



Analytical Laboratory Report

Report ID: S56120.01(01)
Generated on 05/02/2013

Report to

Attention: Susan Graves
ERG
280003 Center Oaks Dr
Wixom, MI 48393

Phone: 248-766-1648 FAX: 248-924-3108
Email: sue.graves@ergrp.net

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:

Andy Ball (andyball@meritlabs.com)
Tabitha Faust (tfaust@meritlabs.com)

Report Summary

Lab Sample ID(s): S56120.01-S56120.07
Project: RACER Davison Rd. Landfill/ PO133645
Collected Date: 04/16/2013 - 04/17/2013
Submitted Date/Time: 04/17/2013 16:00
Sampled by: Laura Lambert
P.O. #: PO133645

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc..

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#69699), WBENC (#2005110032), Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (7 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S56120.01	MW-9-12	Groundwater	04/16/2013 15:55
S56120.02	MW-10-12	Groundwater	04/16/2013 18:00
S56120.03	MW-4-12	Groundwater	04/17/2013 11:35
S56120.04	TW-1	Groundwater	04/17/2013 12:15
S56120.05	MW-3-12	Groundwater	04/17/2013 13:20
S56120.06	GC-3 (Downstream)	Groundwater	04/17/2013 14:00
S56120.07	Trip Blank	Groundwater	04/17/2013 00:01



Analytical Laboratory Report

Lab Sample ID: S56120.01
Sample Tag: MW-9-12
Collected Date/Time: 04/16/2013 15:55
Matrix: Groundwater
COC Reference: 81331

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
3	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/18/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/29/13 10:45	WAT		

Metals

Aluminum	0.014	mg/L	0.005	E200.8	05/01/13 13:32	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 13:32	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 13:32	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 13:32	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 13:32	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 13:32	PER	7440-50-8
Iron	1.00	mg/L	0.02	E200.8	05/01/13 13:32	PER	7439-89-6
Manganese	0.256	mg/L	0.005	E200.8	05/01/13 13:32	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/18/13 15:15	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 13:32	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 13:32	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 14:08	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 14:08	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 14:08	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56120.01 (continued)

Sample Tag: MW-9-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 14:08	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 14:08	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 14:08	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 14:08	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 14:08	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 14:08	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 14:08	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 14:08	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 14:08	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 14:08	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 14:08	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 14:08	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 14:08	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 14:08	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 14:08	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 14:08	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/27/13 20:15	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/27/13 20:15	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56120.01 (continued)

Sample Tag: MW-9-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/27/13 20:15	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/27/13 20:15	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/27/13 20:15	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/27/13 20:15	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/27/13 20:15	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/27/13 20:15	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56120.01 (continued)

Sample Tag: MW-9-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:15	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/27/13 20:15	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56120.02
Sample Tag: MW-10-12
Collected Date/Time: 04/16/2013 18:00
Matrix: Groundwater
COC Reference: 81331

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
3	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/18/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/29/13 10:45	WAT		

Metals

Aluminum	0.012	mg/L	0.005	E200.8	05/01/13 13:40	PER	7429-90-5
Arsenic	0.019	mg/L	0.002	E200.8	05/01/13 13:40	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 13:40	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 13:40	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 13:40	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 13:40	PER	7440-50-8
Iron	11.6	mg/L	0.02	E200.8	05/01/13 13:40	PER	7439-89-6
Manganese	2.17	mg/L	0.005	E200.8	05/01/13 13:40	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/18/13 15:00	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 13:40	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 13:40	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 14:43	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 14:43	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 14:43	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56120.02 (continued)

Sample Tag: MW-10-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 14:43	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 14:43	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 14:43	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 14:43	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 14:43	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 14:43	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 14:43	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 14:43	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 14:43	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 14:43	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 14:43	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 14:43	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 14:43	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 14:43	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 14:43	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 14:43	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/27/13 20:37	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/27/13 20:37	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56120.02 (continued)

Sample Tag: MW-10-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/27/13 20:37	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/27/13 20:37	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/27/13 20:37	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/27/13 20:37	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/27/13 20:37	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/27/13 20:37	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56120.02 (continued)

Sample Tag: MW-10-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:37	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/27/13 20:37	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56120.03
Sample Tag: MW-4-12
Collected Date/Time: 04/17/2013 11:35
Matrix: Groundwater
COC Reference: 81331

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
3	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/18/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/29/13 10:45	WAT		

Metals

Aluminum	0.019	mg/L	0.005	E200.8	05/01/13 13:41	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 13:41	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 13:41	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 13:41	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 13:41	PER	7440-48-4
Copper	0.006	mg/L	0.005	E200.8	05/01/13 13:41	PER	7440-50-8
Iron	0.64	mg/L	0.02	E200.8	05/01/13 13:41	PER	7439-89-6
Manganese	0.164	mg/L	0.005	E200.8	05/01/13 13:41	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/18/13 15:02	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 13:41	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 13:41	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 15:17	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 15:17	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 15:17	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56120.03 (continued)

Sample Tag: MW-4-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 15:17	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 15:17	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 15:17	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 15:17	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 15:17	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 15:17	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 15:17	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 15:17	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 15:17	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 15:17	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 15:17	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 15:17	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 15:17	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 15:17	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 15:17	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 15:17	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/27/13 20:59	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/27/13 20:59	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56120.03 (continued)

Sample Tag: MW-4-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/27/13 20:59	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/27/13 20:59	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/27/13 20:59	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/27/13 20:59	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/27/13 20:59	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/27/13 20:59	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56120.03 (continued)

Sample Tag: MW-4-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 20:59	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/27/13 20:59	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56120.04

Sample Tag: TW-1

Collected Date/Time: 04/17/2013 12:15

Matrix: Groundwater

COC Reference: 81331

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
3	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/18/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/29/13 10:45	WAT		

Metals

Aluminum	0.014	mg/L	0.005	E200.8	05/01/13 13:43	PER	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	05/01/13 13:43	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 13:43	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 13:43	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 13:43	PER	7440-48-4
Copper	0.005	mg/L	0.005	E200.8	05/01/13 13:43	PER	7440-50-8
Iron	0.96	mg/L	0.02	E200.8	05/01/13 13:43	PER	7439-89-6
Manganese	0.005	mg/L	0.005	E200.8	05/01/13 13:43	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/18/13 15:04	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 13:43	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 13:43	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 15:51	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 15:51	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 15:51	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56120.04 (continued)

Sample Tag: TW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 15:51	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 15:51	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 15:51	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 15:51	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 15:51	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 15:51	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 15:51	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 15:51	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 15:51	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 15:51	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 15:51	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 15:51	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 15:51	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 15:51	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 15:51	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 15:51	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/27/13 21:21	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/27/13 21:21	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56120.04 (continued)

Sample Tag: TW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/27/13 21:21	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/27/13 21:21	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/27/13 21:21	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/27/13 21:21	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/27/13 21:21	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/27/13 21:21	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56120.04 (continued)

Sample Tag: TW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:21	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/27/13 21:21	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56120.05
Sample Tag: MW-3-12
Collected Date/Time: 04/17/2013 13:20
Matrix: Groundwater
COC Reference: 81331

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
3	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/18/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/29/13 10:45	WAT		

Metals

Aluminum	0.056	mg/L	0.005	E200.8	05/01/13 13:45	PER	7429-90-5
Arsenic	0.002	mg/L	0.002	E200.8	05/01/13 13:45	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 13:45	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 13:45	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 13:45	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 13:45	PER	7440-50-8
Iron	0.41	mg/L	0.02	E200.8	05/01/13 13:45	PER	7439-89-6
Manganese	0.073	mg/L	0.005	E200.8	05/01/13 13:45	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/18/13 15:06	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 13:45	PER	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	05/01/13 13:45	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 16:25	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 16:25	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 16:25	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56120.05 (continued)

Sample Tag: MW-3-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 16:25	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 16:25	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 16:25	PL	132-64-9	
di-n-Butyl phthalate	5	ug/L	5	SW8270C	05/01/13 16:25	PL	84-74-2	B
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 16:25	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 16:25	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 16:25	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 16:25	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 16:25	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 16:25	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 16:25	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 16:25	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 16:25	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 16:25	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 16:25	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 16:25	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 16:25	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/27/13 21:43	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/27/13 21:43	WAT	67-64-1	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S56120.05 (continued)

Sample Tag: MW-3-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methyl iodide	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/27/13 21:43	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/27/13 21:43	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/27/13 21:43	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/27/13 21:43	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/27/13 21:43	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/27/13 21:43	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	108-86-1	



Analytical Laboratory Report

Lab Sample ID: S56120.05 (continued)

Sample Tag: MW-3-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 21:43	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/27/13 21:43	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56120.06
Sample Tag: GC-3 (Downstream)
Collected Date/Time: 04/17/2013 14:00
Matrix: Groundwater
COC Reference: 81331

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	4.8	IR
3	40ml Glass	HCL	Yes	4.8	IR
1	125ml Plastic	HNO3	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	04/23/13 22:26	EMR		
Mercury Digestion	Completed			E245.1	04/18/13 10:00	CCM		
Metal Digestion	Completed			3015A	05/01/13 09:00	PER		
pH check for VOCs	<2	STD Units		N/A	04/29/13 10:45	WAT		

Metals

Aluminum	0.312	mg/L	0.005	E200.8	05/01/13 14:04	PER	7429-90-5
Arsenic	0.003	mg/L	0.002	E200.8	05/01/13 14:04	PER	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	05/01/13 14:04	PER	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	05/01/13 14:04	PER	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	05/01/13 14:04	PER	7440-48-4
Copper	Not detected	mg/L	0.005	E200.8	05/01/13 14:04	PER	7440-50-8
Iron	1.23	mg/L	0.02	E200.8	05/01/13 14:04	PER	7439-89-6
Manganese	0.076	mg/L	0.005	E200.8	05/01/13 14:04	PER	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	04/18/13 15:08	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.002	E200.8	05/01/13 14:04	PER	7440-62-2
Zinc	0.021	mg/L	0.005	E200.8	05/01/13 14:04	PER	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	05/01/13 16:59	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 16:59	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	05/01/13 16:59	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S56120.06 (continued)

Sample Tag: GC-3 (Downstream)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	05/01/13 16:59	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	05/01/13 16:59	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	05/01/13 16:59	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	05/01/13 16:59	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	05/01/13 16:59	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 16:59	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	05/01/13 16:59	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	05/01/13 16:59	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	05/01/13 16:59	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 16:59	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 16:59	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	05/01/13 16:59	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	05/01/13 16:59	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	05/01/13 16:59	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	05/01/13 16:59	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	05/01/13 16:59	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	04/27/13 22:05	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/27/13 22:05	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S56120.06 (continued)

Sample Tag: GC-3 (Downstream)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/27/13 22:05	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/27/13 22:05	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/27/13 22:05	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/27/13 22:05	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/27/13 22:05	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/27/13 22:05	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S56120.06 (continued)

Sample Tag: GC-3 (Downstream)

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:05	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/27/13 22:05	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S56120.07
Sample Tag: Trip Blank
Collected Date/Time: 04/17/2013 00:01
Matrix: Groundwater
COC Reference: 81331

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	4.8	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

pH check for VOCs	<2	STD Units		N/A	04/29/13 10:45	WAT		

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW8260B	04/27/13 22:27	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	04/27/13 22:27	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	04/27/13 22:27	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	04/27/13 22:27	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	04/27/13 22:27	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	04/27/13 22:27	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	04/27/13 22:27	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	106-93-4	



Analytical Laboratory Report

Lab Sample ID: S56120.07 (continued)

Sample Tag: Trip Blank

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	04/27/13 22:27	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	04/27/13 22:27	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	04/27/13 22:27	WAT	91-57-6	



2680 East Lansing Dr., East Lansing, MI 48823

Phone (517) 332-0167 Fax (517) 332-4034

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C.O.C. PAGE # _____ OF _____

81331

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME				SUSAN GRAVES							
COMPANY				E.R.G.							
ADDRESS								28003 CENTER OAKS DRIVE			
CITY						STATE		ZIP CODE			
WIXOM						MI		48393			
PHONE NO.				FAX NO.				P.O. NO.			
(248) 766-1648				(248) 924-3108				PO133645			
E-MAIL ADDRESS						QUOTE NO.					
sue.graves@ergrp.net											

CONTACT NAME		DAVID FAVERO		☐ SAME	
COMPANY		RACER TRUST			
ADDRESS		2930 ECORSE RD.			
CITY		YPSILANTI		STATE	MI
				ZIP CODE	48198
PHONE NO.		E-MAIL ADDRESS			
(517) 741-6235		dfavero@racertrust.org			

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME: PACER DAVIS ON RD. LANDFILL / PO133645, LANFA LAMBERT / *lanfa*

SAMPLER(S) - PLEASE PRINT/SIGN NAME: *lanfa*

TURNAROUND TIME REQUIRED: ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER

DELIVERABLES REQUIRED: ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER

MATRIX	GW=GROUNDWATER	WW=WASTEWATER	S=SOIL	L=LIQUID	SD=SOLID
CODE:	SL=SLUDGE	DW=DRINKING WATER	O=OIL	WP=WIPE	A=AIR
					W=WASTE

Containers & Preservatives

[illegible][illegible]

RELINQUISHED BY: <i>Carla Lambert</i>	☒ Sampler	DATE	TIME
SIGNATURE/ORGANIZATION <i>ERG CARLA LAMBERT</i>		<i>4/17/13</i>	<i>15:00</i>
RECEIVED BY: <i>[Signature]</i>		DATE	TIME
SIGNATURE/ORGANIZATION <i>[Signature]</i>		<i>4/16/13</i>	<i>5:00</i>
RELINQUISHED BY:		DATE	TIME
SIGNATURE/ORGANIZATION			
RECEIVED BY:		DATE	TIME
SIGNATURE/ORGANIZATION			

RELINQUISHED BY:		DATE		TIME	
SIGNATURE/ORGANIZATION		4-17-13		1600	
RECEIVED BY:		DATE		TIME	
SIGNATURE/ORGANIZATION		4-17-13		1600	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES: TEMP. ON ARRIVAL 48		
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS			

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE



Analytical Laboratory Report

Report ID: S57361.01(01)
Generated on 08/07/2013

Report to

Attention: Susan Graves
ERG
28003 Center Oaks Dr
Wixom, MI 48393

Phone: 248-766-1648 FAX: 248-924-3108
Email: sue.graves@ergrp.net

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:

Tabitha Faust (tfaust@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S57361.01-S57361.11
Project: RACER Davison Rd. Landfill
Collected Date: 07/23/2013 - 07/24/2013
Submitted Date/Time: 07/24/2013 15:15
Sampled by: Laura Lambert
P.O. #:

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc..

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#69699), WBENC (#2005110032), Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (11 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S57361.01	MW-11-12	Groundwater	07/23/2013 17:05
S57361.02	MW-9-12	Groundwater	07/23/2013 19:09
S57361.03	MW-13-12	Groundwater	07/23/2013 16:35
S57361.04	MW-12-12	Groundwater	07/23/2013 16:15
S57361.05	MW-2	Groundwater	07/24/2013 11:20
S57361.06	MW-3-12	Groundwater	07/24/2013 11:20
S57361.07	TW-1	Groundwater	07/24/2013 12:10
S57361.08	MW-4-12	Groundwater	07/24/2013 13:50
S57361.09	MW-5-12	Groundwater	07/24/2013 13:15
S57361.10	DUP-1	Groundwater	07/24/2013 13:30
S57361.11	Trip Blank 2	Liquid	07/24/2013 00:01



Analytical Laboratory Report

Lab Sample ID: S57361.01
Sample Tag: MW-11-12
Collected Date/Time: 07/23/2013 17:05
Matrix: Groundwater
COC Reference: 74942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.6	IR
3	40ml Glass	HCL	Yes	5.6	IR
1	125ml Plastic	HNO3	Yes	5.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/26/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/05/13 10:38	JGH		

Metals

Aluminum	0.011	mg/L	0.005	E200.8	08/01/13 12:36	JRH	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	07/31/13 19:19	JRH	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 19:19	JRH	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 19:19	JRH	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 19:19	JRH	7440-48-4
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 19:19	JRH	7440-50-8
Iron	0.16	mg/L	0.02	E200.8	08/01/13 12:36	JRH	7439-89-6
Manganese	1.04	mg/L	0.005	E200.8	07/31/13 19:19	JRH	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	07/26/13 15:56	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 19:19	JRH	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 12:36	JRH	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/26/13 19:38	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 19:38	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 19:38	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/26/13 19:38	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/26/13 19:38	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/26/13 19:38	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 19:38	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	07/26/13 19:38	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/26/13 19:38	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S57361.01 (continued)

Sample Tag: MW-11-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/26/13 19:38	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/26/13 19:38	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/26/13 19:38	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 19:38	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 19:38	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 19:38	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 19:38	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/26/13 19:38	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 19:38	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 19:38	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/26/13 19:38	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/26/13 19:38	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 19:38	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 19:38	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 19:38	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 19:38	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/26/13 19:38	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 19:38	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/26/13 19:38	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/02/13 15:52	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/02/13 15:52	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S57361.01 (continued)

Sample Tag: MW-11-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/02/13 15:52	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/02/13 15:52	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/02/13 15:52	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/02/13 15:52	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/02/13 15:52	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/02/13 15:52	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S57361.01 (continued)

Sample Tag: MW-11-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 15:52	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/02/13 15:52	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57361.02
Sample Tag: MW-9-12
Collected Date/Time: 07/23/2013 19:09
Matrix: Groundwater
COC Reference: 74942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.6	IR
3	40ml Glass	HCL	Yes	5.6	IR
1	125ml Plastic	HNO3	Yes	5.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/26/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/05/13 10:38	JGH		

Metals

Aluminum	0.030	mg/L	0.005	E200.8	08/01/13 12:39	JRH	7429-90-5	
Arsenic	0.006	mg/L	0.002	E200.8	07/31/13 19:23	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 19:23	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 19:23	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 19:23	JRH	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 19:23	JRH	7440-50-8	
Iron	2.04	mg/L	0.02	E200.8	08/01/13 12:39	JRH	7439-89-6	
Manganese	0.376	mg/L	0.005	E200.8	07/31/13 19:23	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/26/13 15:58	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 19:23	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 12:39	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/26/13 20:07	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 20:07	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 20:07	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/26/13 20:07	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/26/13 20:07	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/26/13 20:07	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 20:07	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	07/26/13 20:07	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/26/13 20:07	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57361.02 (continued)

Sample Tag: MW-9-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/26/13 20:07	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/26/13 20:07	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/26/13 20:07	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 20:07	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 20:07	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 20:07	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 20:07	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	105-67-9	
Dimethyl phthalate	9	ug/L	5	SW8270C	07/26/13 20:07	PL	131-11-3	B
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/26/13 20:07	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 20:07	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 20:07	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/26/13 20:07	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/26/13 20:07	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 20:07	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 20:07	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 20:07	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 20:07	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/26/13 20:07	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 20:07	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/26/13 20:07	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/02/13 16:13	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/02/13 16:13	JGH	67-64-1	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S57361.02 (continued)

Sample Tag: MW-9-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methyl iodide	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/02/13 16:13	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/02/13 16:13	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/02/13 16:13	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/02/13 16:13	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/02/13 16:13	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/02/13 16:13	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	108-86-1	



Analytical Laboratory Report

Lab Sample ID: S57361.02 (continued)

Sample Tag: MW-9-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:13	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/02/13 16:13	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57361.03
Sample Tag: MW-13-12
Collected Date/Time: 07/23/2013 16:35
Matrix: Groundwater
COC Reference: 74942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.6	IR
3	40ml Glass	HCL	Yes	5.6	IR
1	125ml Plastic	HNO3	Yes	5.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/26/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/05/13 10:38	JGH		

Metals

Aluminum	0.027	mg/L	0.005	E200.8	08/01/13 12:42	JRH	7429-90-5	
Arsenic	Not detected	mg/L	0.002	E200.8	07/31/13 19:27	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 19:27	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 19:27	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 19:27	JRH	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 19:27	JRH	7440-50-8	
Iron	0.36	mg/L	0.02	E200.8	08/01/13 12:42	JRH	7439-89-6	
Manganese	0.291	mg/L	0.005	E200.8	07/31/13 19:27	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/26/13 16:00	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 19:27	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 12:42	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/26/13 20:36	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 20:36	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 20:36	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/26/13 20:36	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/26/13 20:36	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/26/13 20:36	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 20:36	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	07/26/13 20:36	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/26/13 20:36	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57361.03 (continued)

Sample Tag: MW-13-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/26/13 20:36	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/26/13 20:36	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/26/13 20:36	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 20:36	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 20:36	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 20:36	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 20:36	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	105-67-9	
Dimethyl phthalate	6	ug/L	5	SW8270C	07/26/13 20:36	PL	131-11-3	B
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/26/13 20:36	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 20:36	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 20:36	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/26/13 20:36	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/26/13 20:36	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 20:36	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 20:36	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 20:36	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 20:36	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/26/13 20:36	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 20:36	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/26/13 20:36	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/02/13 16:33	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/02/13 16:33	JGH	67-64-1	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S57361.03 (continued)

Sample Tag: MW-13-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methyl iodide	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/02/13 16:33	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/02/13 16:33	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/02/13 16:33	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/02/13 16:33	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/02/13 16:33	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/02/13 16:33	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	108-86-1	



Analytical Laboratory Report

Lab Sample ID: S57361.03 (continued)

Sample Tag: MW-13-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:33	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/02/13 16:33	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57361.04
Sample Tag: MW-12-12
Collected Date/Time: 07/23/2013 16:15
Matrix: Groundwater
COC Reference: 74942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.6	IR
3	40ml Glass	HCL	Yes	5.6	IR
1	125ml Plastic	HNO3	Yes	5.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/26/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/05/13 10:43	JGH		

Metals

Aluminum	0.012	mg/L	0.005	E200.8	08/01/13 12:46	JRH	7429-90-5	
Arsenic	0.026	mg/L	0.002	E200.8	07/31/13 19:31	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 19:31	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 19:31	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 19:31	JRH	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 19:31	JRH	7440-50-8	
Iron	27.7	mg/L	0.02	E200.8	08/01/13 12:46	JRH	7439-89-6	
Manganese	4.94	mg/L	0.005	E200.8	07/31/13 19:31	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/26/13 16:02	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 19:31	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 12:46	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/26/13 21:05	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 21:05	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 21:05	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/26/13 21:05	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/26/13 21:05	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/26/13 21:05	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 21:05	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	07/26/13 21:05	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/26/13 21:05	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57361.04 (continued)

Sample Tag: MW-12-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/26/13 21:05	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/26/13 21:05	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/26/13 21:05	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 21:05	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 21:05	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 21:05	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 21:05	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	105-67-9	
Dimethyl phthalate	5	ug/L	5	SW8270C	07/26/13 21:05	PL	131-11-3	B
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/26/13 21:05	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 21:05	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 21:05	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/26/13 21:05	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/26/13 21:05	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 21:05	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 21:05	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 21:05	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 21:05	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/26/13 21:05	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 21:05	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/26/13 21:05	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/02/13 16:54	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/02/13 16:54	JGH	67-64-1	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S57361.04 (continued)

Sample Tag: MW-12-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methyl iodide	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/02/13 16:54	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/02/13 16:54	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/02/13 16:54	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/02/13 16:54	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/02/13 16:54	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/02/13 16:54	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	108-86-1	



Analytical Laboratory Report

Lab Sample ID: S57361.04 (continued)

Sample Tag: MW-12-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/02/13 16:54	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/02/13 16:54	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57361.05
Sample Tag: MW-2
Collected Date/Time: 07/24/2013 11:20
Matrix: Groundwater
COC Reference: 74942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.6	IR
3	40ml Glass	HCL	Yes	5.6	IR
1	125ml Plastic	HNO3	Yes	5.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/26/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Metals

Aluminum	0.012	mg/L	0.005	E200.8	08/01/13 12:49	JRH	7429-90-5	
Arsenic	0.026	mg/L	0.002	E200.8	07/31/13 19:34	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 19:34	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 19:34	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 19:34	JRH	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 19:34	JRH	7440-50-8	
Iron	20.5	mg/L	0.02	E200.8	08/01/13 12:49	JRH	7439-89-6	
Manganese	1.19	mg/L	0.005	E200.8	07/31/13 19:34	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/26/13 16:04	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 19:34	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 12:49	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/26/13 21:34	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 21:34	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 21:34	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/26/13 21:34	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/26/13 21:34	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/26/13 21:34	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 21:34	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	07/26/13 21:34	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/26/13 21:34	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57361.05 (continued)

Sample Tag: MW-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/26/13 21:34	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/26/13 21:34	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/26/13 21:34	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 21:34	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 21:34	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 21:34	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 21:34	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	105-67-9	
Dimethyl phthalate	7	ug/L	5	SW8270C	07/26/13 21:34	PL	131-11-3	B
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/26/13 21:34	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 21:34	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 21:34	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/26/13 21:34	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/26/13 21:34	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 21:34	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 21:34	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 21:34	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 21:34	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/26/13 21:34	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 21:34	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/26/13 21:34	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 17:43	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 17:43	JGH	67-64-1	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S57361.05 (continued)

Sample Tag: MW-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 17:43	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 17:43	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 17:43	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 17:43	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 17:43	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 17:43	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	108-86-1	



Analytical Laboratory Report

Lab Sample ID: S57361.05 (continued)

Sample Tag: MW-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:43	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 17:43	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57361.06
Sample Tag: MW-3-12
Collected Date/Time: 07/24/2013 11:20
Matrix: Groundwater
COC Reference: 74942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.6	IR
3	40ml Glass	HCL	Yes	5.6	IR
1	125ml Plastic	HNO3	Yes	5.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/26/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Metals

Aluminum	0.015	mg/L	0.005	E200.8	08/01/13 12:52	JRH	7429-90-5	
Arsenic	0.013	mg/L	0.002	E200.8	07/31/13 19:38	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 19:38	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 19:38	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 19:38	JRH	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 19:38	JRH	7440-50-8	
Iron	3.48	mg/L	0.02	E200.8	08/01/13 12:52	JRH	7439-89-6	
Manganese	0.855	mg/L	0.005	E200.8	07/31/13 19:38	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/26/13 16:06	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 19:38	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 12:52	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/26/13 22:03	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 22:03	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 22:03	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/26/13 22:03	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/26/13 22:03	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/26/13 22:03	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 22:03	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	07/26/13 22:03	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/26/13 22:03	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57361.06 (continued)

Sample Tag: MW-3-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/26/13 22:03	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/26/13 22:03	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/26/13 22:03	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 22:03	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 22:03	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 22:03	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 22:03	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	105-67-9	
Dimethyl phthalate	6	ug/L	5	SW8270C	07/26/13 22:03	PL	131-11-3	B
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/26/13 22:03	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 22:03	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 22:03	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/26/13 22:03	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/26/13 22:03	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 22:03	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 22:03	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 22:03	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 22:03	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/26/13 22:03	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 22:03	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/26/13 22:03	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 18:04	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 18:04	JGH	67-64-1	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S57361.06 (continued)

Sample Tag: MW-3-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 18:04	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 18:04	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 18:04	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 18:04	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 18:04	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 18:04	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	108-86-1	



Analytical Laboratory Report

Lab Sample ID: S57361.06 (continued)

Sample Tag: MW-3-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:04	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 18:04	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57361.07

Sample Tag: TW-1

Collected Date/Time: 07/24/2013 12:10

Matrix: Groundwater

COC Reference: 74942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.6	IR
3	40ml Glass	HCL	Yes	5.6	IR
1	125ml Plastic	HNO3	Yes	5.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/26/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Metals

Aluminum	0.015	mg/L	0.005	E200.8	08/01/13 12:55	JRH	7429-90-5	
Arsenic	0.004	mg/L	0.002	E200.8	07/31/13 19:42	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 19:42	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 19:42	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 19:42	JRH	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 19:42	JRH	7440-50-8	
Iron	2.20	mg/L	0.02	E200.8	08/01/13 12:55	JRH	7439-89-6	
Manganese	0.260	mg/L	0.005	E200.8	07/31/13 19:42	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/26/13 16:08	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 19:42	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 12:55	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/26/13 22:32	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 22:32	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 22:32	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/26/13 22:32	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/26/13 22:32	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/26/13 22:32	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 22:32	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	07/26/13 22:32	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/26/13 22:32	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57361.07 (continued)

Sample Tag: TW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/26/13 22:32	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/26/13 22:32	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/26/13 22:32	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 22:32	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 22:32	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 22:32	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 22:32	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	105-67-9	
Dimethyl phthalate	6	ug/L	5	SW8270C	07/26/13 22:32	PL	131-11-3	B
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/26/13 22:32	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 22:32	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 22:32	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/26/13 22:32	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/26/13 22:32	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 22:32	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 22:32	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 22:32	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 22:32	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/26/13 22:32	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 22:32	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/26/13 22:32	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 18:25	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 18:25	JGH	67-64-1	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S57361.07 (continued)

Sample Tag: TW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 18:25	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 18:25	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 18:25	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 18:25	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 18:25	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 18:25	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	108-86-1	



Analytical Laboratory Report

Lab Sample ID: S57361.07 (continued)

Sample Tag: TW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:25	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 18:25	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57361.08
Sample Tag: MW-4-12
Collected Date/Time: 07/24/2013 13:50
Matrix: Groundwater
COC Reference: 74942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.6	IR
3	40ml Glass	HCL	Yes	5.6	IR
1	125ml Plastic	HNO3	Yes	5.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/26/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Metals

Aluminum	0.023	mg/L	0.005	E200.8	08/01/13 12:58	JRH	7429-90-5	
Arsenic	0.003	mg/L	0.002	E200.8	07/31/13 19:46	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 19:46	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 19:46	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 19:46	JRH	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 19:46	JRH	7440-50-8	
Iron	0.41	mg/L	0.02	E200.8	08/01/13 12:58	JRH	7439-89-6	
Manganese	1.68	mg/L	0.005	E200.8	07/31/13 19:46	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/26/13 16:10	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 19:46	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 12:58	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/26/13 23:01	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 23:01	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 23:01	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/26/13 23:01	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/26/13 23:01	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/26/13 23:01	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 23:01	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	07/26/13 23:01	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/26/13 23:01	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57361.08 (continued)

Sample Tag: MW-4-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/26/13 23:01	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/26/13 23:01	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/26/13 23:01	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 23:01	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 23:01	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 23:01	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 23:01	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/26/13 23:01	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 23:01	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 23:01	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/26/13 23:01	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/26/13 23:01	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 23:01	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 23:01	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 23:01	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 23:01	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/26/13 23:01	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 23:01	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/26/13 23:01	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 18:46	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 18:46	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S57361.08 (continued)

Sample Tag: MW-4-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 18:46	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 18:46	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 18:46	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 18:46	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 18:46	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 18:46	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S57361.08 (continued)

Sample Tag: MW-4-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 18:46	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 18:46	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57361.09
Sample Tag: MW-5-12
Collected Date/Time: 07/24/2013 13:15
Matrix: Groundwater
COC Reference: 74942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.6	IR
3	40ml Glass	HCL	Yes	5.6	IR
1	125ml Plastic	HNO3	Yes	5.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/26/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Metals

Aluminum	0.011	mg/L	0.005	E200.8	08/01/13 13:04	JRH	7429-90-5	
Arsenic	Not detected	mg/L	0.002	E200.8	07/31/13 19:54	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 19:54	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 19:54	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 19:54	JRH	7440-48-4	
Copper	0.017	mg/L	0.004	E200.8	07/31/13 19:54	JRH	7440-50-8	
Iron	5.55	mg/L	0.02	E200.8	08/01/13 13:04	JRH	7439-89-6	
Manganese	1.10	mg/L	0.005	E200.8	07/31/13 19:54	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/26/13 16:12	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 19:54	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 13:04	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/26/13 23:30	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 23:30	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 23:30	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/26/13 23:30	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/26/13 23:30	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/26/13 23:30	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 23:30	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	07/26/13 23:30	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/26/13 23:30	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57361.09 (continued)

Sample Tag: MW-5-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/26/13 23:30	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/26/13 23:30	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/26/13 23:30	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 23:30	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 23:30	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 23:30	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 23:30	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	105-67-9	
Dimethyl phthalate	7	ug/L	5	SW8270C	07/26/13 23:30	PL	131-11-3	B
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/26/13 23:30	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 23:30	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 23:30	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/26/13 23:30	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/26/13 23:30	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 23:30	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 23:30	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 23:30	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 23:30	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/26/13 23:30	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 23:30	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/26/13 23:30	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 19:07	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 19:07	JGH	67-64-1	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S57361.09 (continued)

Sample Tag: MW-5-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 19:07	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 19:07	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 19:07	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 19:07	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 19:07	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 19:07	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	108-86-1	



Analytical Laboratory Report

Lab Sample ID: S57361.09 (continued)

Sample Tag: MW-5-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:07	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 19:07	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57361.10
Sample Tag: DUP-1
Collected Date/Time: 07/24/2013 13:30
Matrix: Groundwater
COC Reference: 74942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.6	IR
3	40ml Glass	HCL	Yes	5.6	IR
1	125ml Plastic	HNO3	Yes	5.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/26/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Metals

Aluminum	0.010	mg/L	0.005	E200.8	08/01/13 13:01	JRH	7429-90-5	
Arsenic	Not detected	mg/L	0.002	E200.8	07/31/13 19:50	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 19:50	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 19:50	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 19:50	JRH	7440-48-4	
Copper	0.008	mg/L	0.004	E200.8	07/31/13 19:50	JRH	7440-50-8	
Iron	2.74	mg/L	0.02	E200.8	08/01/13 13:01	JRH	7439-89-6	
Manganese	0.966	mg/L	0.005	E200.8	07/31/13 19:50	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/26/13 16:14	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 19:50	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 13:01	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/26/13 23:59	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 23:59	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 23:59	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/26/13 23:59	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/26/13 23:59	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/26/13 23:59	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 23:59	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	07/26/13 23:59	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/26/13 23:59	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57361.10 (continued)

Sample Tag: DUP-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/26/13 23:59	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/26/13 23:59	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/26/13 23:59	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 23:59	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 23:59	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 23:59	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 23:59	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	105-67-9	
Dimethyl phthalate	6	ug/L	5	SW8270C	07/26/13 23:59	PL	131-11-3	B
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/26/13 23:59	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 23:59	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 23:59	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/26/13 23:59	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/26/13 23:59	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 23:59	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 23:59	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 23:59	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 23:59	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/26/13 23:59	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 23:59	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/26/13 23:59	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 19:27	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 19:27	JGH	67-64-1	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S57361.10 (continued)

Sample Tag: DUP-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 19:27	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 19:27	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 19:27	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 19:27	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 19:27	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 19:27	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	108-86-1	



Analytical Laboratory Report

Lab Sample ID: S57361.10 (continued)

Sample Tag: DUP-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:27	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 19:27	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57361.11
Sample Tag: Trip Blank 2
Collected Date/Time: 07/24/2013 00:01
Matrix: Liquid
COC Reference: 74942

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	5.6	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 16:41	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 16:41	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 16:41	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 16:41	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 16:41	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 16:41	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 16:41	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	106-93-4	



Analytical Laboratory Report

Lab Sample ID: S57361.11 (continued)

Sample Tag: Trip Blank 2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 16:41	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 16:41	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 16:41	JGH	91-57-6	



2680 East Lansing Dr., East Lansing, MI 48823
Phone (517) 332-0167 Fax (517) 332-4034
www.meritlabs.com

C.O.C. PAGE # _____ OF _____

74942

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME SUE GRAVES		
COMPANY ERG		
ADDRESS 28003 CENTER OAKS CT. STE. 106		
CITY WIXOM	STATE MI	ZIP CODE 48393
PHONE NO. 248-766-1648	FAX NO. 248-924-3108	P.O. NO.
E-MAIL ADDRESS Sue.graves@erggrp.net		QUOTE NO.

CONTACT NAME DAVID FAVERO		☐ SAME
COMPANY RACER		
ADDRESS 2930 ELORSE RD		
CITY YPSILANTI	STATE MI	ZIP CODE 48198
PHONE NO. 248-741-6235	E-MAIL ADDRESS d.favero@racertrust.org	

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME RACER: Davison Rd Landfill	SAMPLER(S) - PLEASE PRINT/SIGN NAME LAURA LAMBERT/Lm L
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER _____	
DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____	

MATRIX CODE:	GW=GROUNDWATER	WW=WASTEWATER	S=SOIL	L=LIQUID	SD=SOLID	
	SL=SLUDGE	DW=DRINKING WATER	O=OIL	WP=WIPE	A=AIR	W=WASTE

Containers & Preservatives

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	NONE	HCl	HNO ₃	H ₂ SO ₄	NaOH	MeOH	OTHER	VOC	SVOC	Al, As, Fe, etc.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

RELINQUISHED BY: LAURA LAMBERT	☒ Sampler	DATE 7-24-13	TIME 14:25
SIGNATURE/ORGANIZATION [Signature]		DATE 7-24-13	TIME 14:25
RECEIVED BY: [Signature]		DATE	TIME
SIGNATURE/ORGANIZATION		DATE	TIME
RELINQUISHED BY:		DATE	TIME
SIGNATURE/ORGANIZATION		DATE	TIME
RECEIVED BY:		DATE	TIME
SIGNATURE/ORGANIZATION		DATE	TIME

RELINQUISHED BY: [Signature]	DATE 7-24-13	TIME 13:15
SIGNATURE/ORGANIZATION [Signature]		
RECEIVED BY: [Signature]	DATE 7-24-13	TIME 13:15
SIGNATURE/ORGANIZATION		
SEAL NO.	SEAL INTACT ☐ YES ☐ NO	INITIALS
SEAL NO.	SEAL INTACT ☐ YES ☐ NO	INITIALS
NOTES:		TEMP. ON ARRIVAL 54.6



Analytical Laboratory Report

Report ID: S57348.01(01)
Generated on 08/01/2013

Report to

Attention: Susan Graves
ERG
28003 Center Oaks Dr
Wixom, MI 48393

Phone: 248-766-1648 FAX: 248-924-3108
Email: sue.graves@ergrp.net

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:

Tabitha Faust (tfaust@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S57348.01-S57348.07
Project: RACER Davison Rd. Landfill
Collected Date: 07/22/2013 - 07/23/2013
Submitted Date/Time: 07/23/2013 15:45
Sampled by: L Lambert/S Graves
P.O. #:

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc..

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#69699), WBENC (#2005110032), Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (7 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S57348.01	D-3 East	Liquid	07/22/2013 15:35
S57348.02	GC-1 Up	Liquid	07/22/2013 16:30
S57348.03	GC-2 Mid	Liquid	07/22/2013 17:10
S57348.04	GC-3 Down	Liquid	07/22/2013 17:30
S57348.05	MW-14-12	Groundwater	07/23/2013 13:00
S57348.06	TW-6	Groundwater	07/23/2013 13:00
S57348.07	Trip Blank 1	Liquid	07/23/2013 00:01



Analytical Laboratory Report

Lab Sample ID: S57348.01

Sample Tag: D-3 East

Collected Date/Time: 07/22/2013 15:35

Matrix: Liquid

COC Reference: 74943

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.4	IR
3	40ml Glass	HCL	Yes	5.4	IR
1	125ml Plastic	HNO3	Yes	5.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/24/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/01/13 10:30	WAT		

Metals

Aluminum	0.024	mg/L	0.005	E200.8	08/01/13 11:55	JRH	7429-90-5
Arsenic	0.018	mg/L	0.002	E200.8	07/31/13 18:32	JRH	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 18:32	JRH	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 18:32	JRH	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 18:32	JRH	7440-48-4
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 18:32	JRH	7440-50-8
Iron	19.0	mg/L	0.02	E200.8	08/01/13 11:55	JRH	7439-89-6
Manganese	10.4	mg/L	0.005	E200.8	07/31/13 18:32	JRH	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	07/24/13 16:01	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 18:32	JRH	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 11:55	JRH	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/27/13 00:28	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/27/13 00:28	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/27/13 00:28	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/27/13 00:28	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/27/13 00:28	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/27/13 00:28	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/27/13 00:28	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	07/27/13 00:28	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/27/13 00:28	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S57348.01 (continued)

Sample Tag: D-3 East

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/27/13 00:28	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/27/13 00:28	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/27/13 00:28	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/27/13 00:28	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/27/13 00:28	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/27/13 00:28	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/27/13 00:28	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	105-67-9	
Dimethyl phthalate	21	ug/L	5	SW8270C	07/27/13 00:28	PL	131-11-3	B
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/27/13 00:28	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/27/13 00:28	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/27/13 00:28	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/27/13 00:28	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/27/13 00:28	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/27/13 00:28	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/27/13 00:28	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/27/13 00:28	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/27/13 00:28	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/27/13 00:28	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/27/13 00:28	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/27/13 00:28	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	07/31/13 19:18	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	07/31/13 19:18	WAT	67-64-1	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S57348.01 (continued)

Sample Tag: D-3 East

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methyl iodide	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	07/31/13 19:18	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	07/31/13 19:18	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	07/31/13 19:18	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	07/31/13 19:18	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	07/31/13 19:18	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	07/31/13 19:18	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	108-86-1	



Analytical Laboratory Report

Lab Sample ID: S57348.01 (continued)

Sample Tag: D-3 East

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:18	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	07/31/13 19:18	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57348.02
Sample Tag: GC-1 Up
Collected Date/Time: 07/22/2013 16:30
Matrix: Liquid
COC Reference: 74943

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.4	IR
3	40ml Glass	HCL	Yes	5.4	IR
1	125ml Plastic	HNO3	Yes	5.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/24/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/01/13 10:30	WAT		

Metals

Aluminum	0.065	mg/L	0.005	E200.8	08/01/13 12:02	JRH	7429-90-5
Arsenic	0.006	mg/L	0.002	E200.8	07/31/13 18:40	JRH	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 18:40	JRH	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 18:40	JRH	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 18:40	JRH	7440-48-4
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 18:40	JRH	7440-50-8
Iron	0.40	mg/L	0.02	E200.8	08/01/13 12:02	JRH	7439-89-6
Manganese	0.057	mg/L	0.005	E200.8	07/31/13 18:40	JRH	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	07/24/13 16:03	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 18:40	JRH	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 12:02	JRH	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/26/13 16:43	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 16:43	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 16:43	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/26/13 16:43	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/26/13 16:43	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/26/13 16:43	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 16:43	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	07/26/13 16:43	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/26/13 16:43	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S57348.02 (continued)

Sample Tag: GC-1 Up

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/26/13 16:43	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/26/13 16:43	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/26/13 16:43	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 16:43	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 16:43	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 16:43	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 16:43	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	105-67-9	
Dimethyl phthalate	6	ug/L	5	SW8270C	07/26/13 16:43	PL	131-11-3	B
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/26/13 16:43	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 16:43	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 16:43	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/26/13 16:43	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/26/13 16:43	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 16:43	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 16:43	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 16:43	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 16:43	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/26/13 16:43	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 16:43	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/26/13 16:43	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	07/31/13 19:39	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	07/31/13 19:39	WAT	67-64-1	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S57348.02 (continued)

Sample Tag: GC-1 Up

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methyl iodide	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	07/31/13 19:39	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	07/31/13 19:39	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	07/31/13 19:39	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	07/31/13 19:39	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	07/31/13 19:39	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	07/31/13 19:39	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	108-86-1	



Analytical Laboratory Report

Lab Sample ID: S57348.02 (continued)

Sample Tag: GC-1 Up

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 19:39	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	07/31/13 19:39	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57348.03
Sample Tag: GC-2 Mid
Collected Date/Time: 07/22/2013 17:10
Matrix: Liquid
COC Reference: 74943

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.4	IR
3	40ml Glass	HCL	Yes	5.4	IR
1	125ml Plastic	HNO3	Yes	5.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/24/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/01/13 10:30	WAT		

Metals

Aluminum	0.014	mg/L	0.005	E200.8	08/01/13 12:05	JRH	7429-90-5	
Arsenic	0.006	mg/L	0.002	E200.8	07/31/13 18:43	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 18:43	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 18:43	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 18:43	JRH	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 18:43	JRH	7440-50-8	
Iron	0.29	mg/L	0.02	E200.8	08/01/13 12:05	JRH	7439-89-6	
Manganese	0.038	mg/L	0.005	E200.8	07/31/13 18:43	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/24/13 16:05	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 18:43	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 12:05	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/26/13 17:13	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 17:13	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 17:13	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/26/13 17:13	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/26/13 17:13	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/26/13 17:13	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 17:13	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	07/26/13 17:13	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/26/13 17:13	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57348.03 (continued)

Sample Tag: GC-2 Mid

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/26/13 17:13	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/26/13 17:13	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/26/13 17:13	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 17:13	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 17:13	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 17:13	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 17:13	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/26/13 17:13	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 17:13	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 17:13	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/26/13 17:13	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/26/13 17:13	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 17:13	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 17:13	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 17:13	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 17:13	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/26/13 17:13	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 17:13	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/26/13 17:13	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	07/31/13 20:00	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	07/31/13 20:00	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S57348.03 (continued)

Sample Tag: GC-2 Mid

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	07/31/13 20:00	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	07/31/13 20:00	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	07/31/13 20:00	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	07/31/13 20:00	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	07/31/13 20:00	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	07/31/13 20:00	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S57348.03 (continued)

Sample Tag: GC-2 Mid

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:00	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	07/31/13 20:00	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57348.04
Sample Tag: GC-3 Down
Collected Date/Time: 07/22/2013 17:30
Matrix: Liquid
COC Reference: 74943

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.4	IR
3	40ml Glass	HCL	Yes	5.4	IR
1	125ml Plastic	HNO3	Yes	5.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/24/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/01/13 10:30	WAT		

Metals

Aluminum	0.019	mg/L	0.005	E200.8	08/01/13 12:08	JRH	7429-90-5
Arsenic	0.007	mg/L	0.002	E200.8	07/31/13 18:47	JRH	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 18:47	JRH	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 18:47	JRH	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 18:47	JRH	7440-48-4
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 18:47	JRH	7440-50-8
Iron	0.28	mg/L	0.02	E200.8	08/01/13 12:08	JRH	7439-89-6
Manganese	0.032	mg/L	0.005	E200.8	07/31/13 18:47	JRH	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	07/24/13 16:07	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 18:47	JRH	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 12:08	JRH	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/26/13 17:42	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 17:42	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 17:42	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/26/13 17:42	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/26/13 17:42	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/26/13 17:42	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 17:42	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	07/26/13 17:42	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/26/13 17:42	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S57348.04 (continued)

Sample Tag: GC-3 Down

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/26/13 17:42	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/26/13 17:42	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/26/13 17:42	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 17:42	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 17:42	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 17:42	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 17:42	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/26/13 17:42	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 17:42	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 17:42	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/26/13 17:42	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/26/13 17:42	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 17:42	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 17:42	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 17:42	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 17:42	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/26/13 17:42	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 17:42	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/26/13 17:42	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	07/31/13 20:21	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	07/31/13 20:21	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S57348.04 (continued)

Sample Tag: GC-3 Down

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	07/31/13 20:21	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	07/31/13 20:21	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	07/31/13 20:21	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	07/31/13 20:21	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	07/31/13 20:21	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	07/31/13 20:21	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S57348.04 (continued)

Sample Tag: GC-3 Down

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:21	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	07/31/13 20:21	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57348.05
Sample Tag: MW-14-12
Collected Date/Time: 07/23/2013 13:00
Matrix: Groundwater
COC Reference: 74943

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.4	IR
3	40ml Glass	HCL	Yes	5.4	IR
1	125ml Plastic	HNO3	Yes	5.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/24/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/01/13 10:30	WAT		

Metals

Aluminum	0.022	mg/L	0.005	E200.8	08/01/13 12:11	JRH	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	07/31/13 18:51	JRH	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 18:51	JRH	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 18:51	JRH	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 18:51	JRH	7440-48-4
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 18:51	JRH	7440-50-8
Iron	0.02	mg/L	0.02	E200.8	08/01/13 12:11	JRH	7439-89-6
Manganese	0.022	mg/L	0.005	E200.8	07/31/13 18:51	JRH	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	07/24/13 16:09	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 18:51	JRH	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 12:11	JRH	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/26/13 18:11	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 18:11	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 18:11	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/26/13 18:11	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/26/13 18:11	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/26/13 18:11	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 18:11	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	07/26/13 18:11	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/26/13 18:11	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S57348.05 (continued)

Sample Tag: MW-14-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/26/13 18:11	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/26/13 18:11	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/26/13 18:11	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 18:11	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 18:11	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 18:11	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 18:11	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	105-67-9	
Dimethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/26/13 18:11	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 18:11	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 18:11	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/26/13 18:11	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/26/13 18:11	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 18:11	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 18:11	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 18:11	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 18:11	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/26/13 18:11	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 18:11	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/26/13 18:11	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	07/31/13 20:41	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	07/31/13 20:41	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S57348.05 (continued)

Sample Tag: MW-14-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	07/31/13 20:41	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	07/31/13 20:41	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	07/31/13 20:41	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	07/31/13 20:41	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	07/31/13 20:41	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	07/31/13 20:41	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S57348.05 (continued)

Sample Tag: MW-14-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 20:41	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	07/31/13 20:41	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57348.06
Sample Tag: TW-6
Collected Date/Time: 07/23/2013 13:00
Matrix: Groundwater
COC Reference: 74943

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.4	IR
3	40ml Glass	HCL	Yes	5.4	IR
1	125ml Plastic	HNO3	Yes	5.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/25/13 17:41	PL		
Mercury Digestion	Completed			E245.1	07/24/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 12:30	JRH		
pH check for VOCs	<2	STD Units		N/A	08/01/13 10:30	WAT		

Metals

Aluminum	0.033	mg/L	0.005	E200.8	08/01/13 12:14	JRH	7429-90-5	
Arsenic	0.002	mg/L	0.002	E200.8	07/31/13 18:55	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 18:55	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 18:55	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 18:55	JRH	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 18:55	JRH	7440-50-8	
Iron	1.88	mg/L	0.02	E200.8	08/01/13 12:14	JRH	7439-89-6	
Manganese	1.09	mg/L	0.005	E200.8	07/31/13 18:55	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/24/13 16:11	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 18:55	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 12:14	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	07/26/13 18:40	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 18:40	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 18:40	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	07/26/13 18:40	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	07/26/13 18:40	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	07/26/13 18:40	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 18:40	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	07/26/13 18:40	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	07/26/13 18:40	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57348.06 (continued)

Sample Tag: TW-6

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	07/26/13 18:40	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	07/26/13 18:40	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	07/26/13 18:40	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 18:40	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 18:40	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	07/26/13 18:40	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	07/26/13 18:40	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	105-67-9	
Dimethyl phthalate	5	ug/L	5	SW8270C	07/26/13 18:40	PL	131-11-3	B
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	07/26/13 18:40	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 18:40	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	07/26/13 18:40	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	07/26/13 18:40	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	07/26/13 18:40	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 18:40	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 18:40	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	07/26/13 18:40	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	07/26/13 18:40	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	07/26/13 18:40	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	07/26/13 18:40	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	07/26/13 18:40	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	07/31/13 21:02	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	07/31/13 21:02	WAT	67-64-1	

B-Compound also found in associated method blank



Analytical Laboratory Report

Lab Sample ID: S57348.06 (continued)

Sample Tag: TW-6

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Methyl iodide	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	07/31/13 21:02	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	07/31/13 21:02	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	07/31/13 21:02	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	07/31/13 21:02	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	07/31/13 21:02	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	07/31/13 21:02	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	108-86-1	



Analytical Laboratory Report

Lab Sample ID: S57348.06 (continued)

Sample Tag: TW-6

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:02	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	07/31/13 21:02	WAT	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57348.07
Sample Tag: Trip Blank 1
Collected Date/Time: 07/23/2013 00:01
Matrix: Liquid
COC Reference: 74943

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	5.4	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

pH check for VOCs	<2	STD Units		N/A	08/01/13 10:40	WAT		

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW8260B	07/31/13 21:23	WAT	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	07/31/13 21:23	WAT	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	07/31/13 21:23	WAT	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	07/31/13 21:23	WAT	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	07/31/13 21:23	WAT	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	07/31/13 21:23	WAT	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	07/31/13 21:23	WAT	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	106-93-4	



Analytical Laboratory Report

Lab Sample ID: S57348.07 (continued)

Sample Tag: Trip Blank 1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	07/31/13 21:23	WAT		
o-Xylene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	07/31/13 21:23	WAT	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	07/31/13 21:23	WAT	91-57-6	

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME SUE GRAVES			
COMPANY ERG			
ADDRESS 28003 CENTER OAKS CT. STE. 106			
CITY WIXOM			STATE MI
			ZIP CODE 48393
PHONE NO. 248-766-1648		FAX NO. 248.724.3108	P.O. NO.
E-MAIL ADDRESS sue.graves@ergp.net			QUOTE NO.

CONTACT NAME DAVID FAVERO		☐ SAME	
COMPANY			
ADDRESS 2930 ELISE RD			
CITY VPSILANTI		STATE MI	ZIP CODE 48198
PHONE NO. 217.741.6235		E-MAIL ADDRESS DAVID.FAVERO@RACETRUST.ORG	

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME RACE: DAVISON RD. LANDFILL	SAMPLER(S) - PLEASE PRINT/SIGN NAME LAURA LAMBERT <i>Susan Grube</i>
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER _____	
DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____	

Certifications

☐ OHIO VAP ☐ Drinking Water

☐ DoD ☐ NPDES

Project Locations

☐ Detroit ☐ New York

☐ Other _____

Special Instructions

MATRIX	GW=GROUNDWATER	WW=WASTEWATER	S=SOIL	L=LIQUID	SD=SOLID
CODE:	SL=SLUDGE	DW=DRINKING WATER	O=OIL	WP=WIPE	A=AIR
					W=WASTE

Containers & Preservatives

[illegible]

RELINQUISHED BY: SIGNATURE/ORGANIZATION	<i>Chen Cui</i> <i>ERV</i>	☒ Sampler	DATE 7/23/13	TIME 14:50
RECEIVED BY: SIGNATURE/ORGANIZATION	<i>Chen Cui</i> <i>ERV</i>		DATE 7-23-13	TIME 17:50
RELINQUISHED BY: SIGNATURE/ORGANIZATION			DATE	TIME
RECEIVED BY: SIGNATURE/ORGANIZATION			DATE	TIME

RELINQUISHED BY: SIGNATURE/ORGANIZATION		DATE 7-23-13		TIME 1545	
RECEIVED BY: SIGNATURE/ORGANIZATION		DATE 7-23-13		TIME 1550	
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS	NOTES:	TEMP. ON ARRIVAL	514
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS			



Analytical Laboratory Report

Report ID: S57403.01(01)
Generated on 08/07/2013

Report to

Attention: Susan Graves
ERG
28003 Center Oaks Dr
Wixom, MI 48393

Phone: 248-766-1648 FAX: 248-924-3108
Email: sue.graves@ergrp.net

Report produced by

Merit Laboratories, Inc.
2680 East Lansing Drive
East Lansing, MI 48823

Phone: (517) 332-0167 FAX: (517) 332-6333

Contacts for report questions:

Tabitha Faust (tfaust@meritlabs.com)
Barbara Ball (bball@meritlabs.com)

Report Summary

Lab Sample ID(s): S57403.01-S57403.11
Project: RACER Davison Rd. Landfill
Collected Date: 07/24/2013 - 07/25/2013
Submitted Date/Time: 07/26/2013 13:30
Sampled by: Laura Lambert
P.O. #:

Report Notes

Results relate only to items tested as received by the laboratory.
Methods may be modified for improved performance.
Results reported on a dry weight basis where applicable.
'Not detected' indicates that parameter was not found at a level equal to or greater than the reporting limit (RL).
Samples are held by the lab for 30 days from the final report date unless a written request to hold longer is provided by the client.
Report shall not be reproduced except in full, without the written approval of Merit Laboratories, Inc..

Laboratory Certifications:

Michigan DNRE (#9956), DOD/ISO 17025 (#69699), WBENC (#2005110032), Ohio EPA (#CL0002), IN Drinking Water (#C-MI-07), NELAC NY (#11814)
Some analytes reported may not be certified. Full certification lists are available upon request.

Violetta F. Murshak
Laboratory Director



Analytical Laboratory Report

Sample Summary (11 samples)

Sample ID	Sample Tag	Matrix	Collected Date/Time
S57403.01	MW-7-12	Groundwater	07/24/2013 16:40
S57403.02	MW-1	Groundwater	07/24/2013 16:39
S57403.03	MW-4-04	Groundwater	07/25/2013 10:40
S57403.04	DUP-2	Groundwater	07/25/2013 10:50
S57403.05	MW-8-12	Groundwater	07/25/2013 10:50
S57403.06	MW-2-12	Groundwater	07/25/2013 12:45
S57403.07	MW-10-12	Groundwater	07/25/2013 12:57
S57403.08	MW-1-12	Groundwater	07/25/2013 15:05
S57403.09	MW-6-12	Groundwater	07/25/2013 15:35
S57403.10	Trip Blank 3	Liquid	07/25/2013 00:01
S57403.11	Trip Blank 4	Liquid	07/25/2013 00:01



Analytical Laboratory Report

Lab Sample ID: S57403.01
Sample Tag: MW-7-12
Collected Date/Time: 07/24/2013 16:40
Matrix: Groundwater
COC Reference: 74941

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.5	IR
3	40ml Glass	HCL	Yes	5.5	IR
1	125ml Plastic	HNO3	Yes	5.5	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/31/13 23:53	EMR		
Mercury Digestion	Completed			E245.1	07/29/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 14:00	JRH		
pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Metals

Aluminum	0.011	mg/L	0.005	E200.8	08/01/13 13:42	JRH	7429-90-5	
Arsenic	Not detected	mg/L	0.002	E200.8	07/31/13 21:22	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 21:22	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 21:22	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 21:22	JRH	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 21:22	JRH	7440-50-8	
Iron	0.10	mg/L	0.02	E200.8	08/01/13 13:42	JRH	7439-89-6	
Manganese	0.266	mg/L	0.005	E200.8	07/31/13 21:22	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/29/13 16:51	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 21:22	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 13:42	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/06/13 16:09	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 16:09	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 16:09	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/06/13 16:09	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/06/13 16:09	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/06/13 16:09	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 16:09	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/06/13 16:09	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/06/13 16:09	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57403.01 (continued)

Sample Tag: MW-7-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	08/06/13 16:09	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/06/13 16:09	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/06/13 16:09	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 16:09	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 16:09	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 16:09	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 16:09	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	105-67-9	
Dimethyl phthalate	15	ug/L	5	SW8270C	08/06/13 16:09	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/06/13 16:09	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 16:09	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 16:09	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/06/13 16:09	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/06/13 16:09	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 16:09	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 16:09	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 16:09	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 16:09	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/06/13 16:09	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 16:09	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/06/13 16:09	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 19:48	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 19:48	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S57403.01 (continued)

Sample Tag: MW-7-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 19:48	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 19:48	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 19:48	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 19:48	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 19:48	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 19:48	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S57403.01 (continued)

Sample Tag: MW-7-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 19:48	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 19:48	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57403.02
Sample Tag: MW-1
Collected Date/Time: 07/24/2013 16:39
Matrix: Groundwater
COC Reference: 74941

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.5	IR
3	40ml Glass	HCL	Yes	5.5	IR
1	125ml Plastic	HNO3	Yes	5.5	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	07/31/13 23:53	EMR		
Mercury Digestion	Completed			E245.1	07/29/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 14:00	JRH		
pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Metals

Aluminum	0.007	mg/L	0.005	E200.8	08/01/13 13:45	JRH	7429-90-5
Arsenic	0.005	mg/L	0.002	E200.8	07/31/13 21:26	JRH	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 21:26	JRH	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 21:26	JRH	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 21:26	JRH	7440-48-4
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 21:26	JRH	7440-50-8
Iron	1.36	mg/L	0.02	E200.8	08/01/13 13:45	JRH	7439-89-6
Manganese	1.48	mg/L	0.005	E200.8	07/31/13 21:26	JRH	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	07/29/13 16:53	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 21:26	JRH	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 13:45	JRH	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/06/13 16:38	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 16:38	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 16:38	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/06/13 16:38	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/06/13 16:38	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/06/13 16:38	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 16:38	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	08/06/13 16:38	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/06/13 16:38	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S57403.02 (continued)

Sample Tag: MW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	08/06/13 16:38	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/06/13 16:38	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/06/13 16:38	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 16:38	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 16:38	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 16:38	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 16:38	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	105-67-9	
Dimethyl phthalate	9	ug/L	5	SW8270C	08/06/13 16:38	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/06/13 16:38	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 16:38	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 16:38	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/06/13 16:38	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/06/13 16:38	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 16:38	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 16:38	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 16:38	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 16:38	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/06/13 16:38	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 16:38	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/06/13 16:38	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 20:09	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 20:09	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S57403.02 (continued)

Sample Tag: MW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 20:09	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 20:09	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 20:09	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 20:09	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 20:09	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 20:09	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S57403.02 (continued)

Sample Tag: MW-1

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:09	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 20:09	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57403.03
Sample Tag: MW-4-04
Collected Date/Time: 07/25/2013 10:40
Matrix: Groundwater
COC Reference: 74941

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.5	IR
3	40ml Glass	HCL	Yes	5.5	IR
1	125ml Plastic	HNO3	Yes	5.5	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/31/13 23:53	EMR		
Mercury Digestion	Completed			E245.1	07/29/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 14:00	JRH		
pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Metals

Aluminum	0.006	mg/L	0.005	E200.8	08/01/13 13:48	JRH	7429-90-5	
Arsenic	Not detected	mg/L	0.002	E200.8	07/31/13 21:30	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 21:30	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 21:30	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 21:30	JRH	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 21:30	JRH	7440-50-8	
Iron	0.32	mg/L	0.02	E200.8	08/01/13 13:48	JRH	7439-89-6	
Manganese	0.252	mg/L	0.005	E200.8	07/31/13 21:30	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/29/13 16:55	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 21:30	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 13:48	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/06/13 17:08	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 17:08	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 17:08	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/06/13 17:08	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/06/13 17:08	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/06/13 17:08	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 17:08	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/06/13 17:08	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/06/13 17:08	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57403.03 (continued)

Sample Tag: MW-4-04

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	08/06/13 17:08	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/06/13 17:08	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/06/13 17:08	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 17:08	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 17:08	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 17:08	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 17:08	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	105-67-9	
Dimethyl phthalate	9	ug/L	5	SW8270C	08/06/13 17:08	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/06/13 17:08	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 17:08	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 17:08	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/06/13 17:08	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/06/13 17:08	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 17:08	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 17:08	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 17:08	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 17:08	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/06/13 17:08	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 17:08	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/06/13 17:08	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 20:30	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 20:30	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S57403.03 (continued)

Sample Tag: MW-4-04

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 20:30	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 20:30	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 20:30	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 20:30	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 20:30	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 20:30	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S57403.03 (continued)

Sample Tag: MW-4-04

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:30	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 20:30	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57403.04
Sample Tag: DUP-2
Collected Date/Time: 07/25/2013 10:50
Matrix: Groundwater
COC Reference: 74941

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.5	IR
3	40ml Glass	HCL	Yes	5.5	IR
1	125ml Plastic	HNO3	Yes	5.5	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/31/13 23:53	EMR		
Mercury Digestion	Completed			E245.1	07/29/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 14:00	JRH		
pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Metals

Aluminum	0.007	mg/L	0.005	E200.8	08/01/13 13:51	JRH	7429-90-5	
Arsenic	Not detected	mg/L	0.002	E200.8	07/31/13 21:34	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 21:34	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 21:34	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 21:34	JRH	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 21:34	JRH	7440-50-8	
Iron	0.65	mg/L	0.02	E200.8	08/01/13 13:51	JRH	7439-89-6	
Manganese	0.278	mg/L	0.005	E200.8	07/31/13 21:34	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/29/13 16:57	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 21:34	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 13:51	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/06/13 17:37	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 17:37	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 17:37	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/06/13 17:37	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/06/13 17:37	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/06/13 17:37	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 17:37	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/06/13 17:37	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/06/13 17:37	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57403.04 (continued)

Sample Tag: DUP-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	08/06/13 17:37	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/06/13 17:37	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/06/13 17:37	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 17:37	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 17:37	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 17:37	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 17:37	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	105-67-9	
Dimethyl phthalate	10	ug/L	5	SW8270C	08/06/13 17:37	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/06/13 17:37	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 17:37	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 17:37	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/06/13 17:37	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/06/13 17:37	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 17:37	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 17:37	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 17:37	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 17:37	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/06/13 17:37	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 17:37	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/06/13 17:37	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 20:50	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 20:50	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S57403.04 (continued)

Sample Tag: DUP-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 20:50	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 20:50	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 20:50	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 20:50	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 20:50	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 20:50	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S57403.04 (continued)

Sample Tag: DUP-2

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 20:50	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 20:50	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57403.05
Sample Tag: MW-8-12
Collected Date/Time: 07/25/2013 10:50
Matrix: Groundwater
COC Reference: 74941

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.5	IR
3	40ml Glass	HCL	Yes	5.5	IR
1	125ml Plastic	HNO3	Yes	5.5	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	07/31/13 23:53	EMR		
Mercury Digestion	Completed			E245.1	07/29/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 14:00	JRH		
pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Metals

Aluminum	0.144	mg/L	0.005	E200.8	08/01/13 13:54	JRH	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	07/31/13 21:38	JRH	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 21:38	JRH	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 21:38	JRH	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 21:38	JRH	7440-48-4
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 21:38	JRH	7440-50-8
Iron	0.70	mg/L	0.02	E200.8	08/01/13 13:54	JRH	7439-89-6
Manganese	0.269	mg/L	0.005	E200.8	07/31/13 21:38	JRH	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	07/29/13 16:59	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 21:38	JRH	7440-62-2
Zinc	0.009	mg/L	0.005	E200.8	08/01/13 13:54	JRH	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/06/13 18:06	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 18:06	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 18:06	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/06/13 18:06	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/06/13 18:06	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/06/13 18:06	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 18:06	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	08/06/13 18:06	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/06/13 18:06	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S57403.05 (continued)

Sample Tag: MW-8-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	08/06/13 18:06	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/06/13 18:06	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/06/13 18:06	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 18:06	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 18:06	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 18:06	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 18:06	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	105-67-9	
Dimethyl phthalate	11	ug/L	5	SW8270C	08/06/13 18:06	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/06/13 18:06	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 18:06	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 18:06	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/06/13 18:06	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/06/13 18:06	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 18:06	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 18:06	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 18:06	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 18:06	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/06/13 18:06	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 18:06	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/06/13 18:06	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 21:11	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 21:11	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S57403.05 (continued)

Sample Tag: MW-8-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 21:11	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 21:11	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 21:11	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 21:11	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 21:11	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 21:11	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S57403.05 (continued)

Sample Tag: MW-8-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:11	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 21:11	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57403.06
Sample Tag: MW-2-12
Collected Date/Time: 07/25/2013 12:45
Matrix: Groundwater
COC Reference: 74941

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.5	IR
3	40ml Glass	HCL	Yes	5.5	IR
1	125ml Plastic	HNO3	Yes	5.5	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/31/13 23:53	EMR		
Mercury Digestion	Completed			E245.1	07/29/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 14:00	JRH		
pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Metals

Aluminum	0.008	mg/L	0.005	E200.8	08/01/13 13:57	JRH	7429-90-5	
Arsenic	Not detected	mg/L	0.002	E200.8	07/31/13 21:42	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 21:42	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 21:42	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 21:42	JRH	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 21:42	JRH	7440-50-8	
Iron	0.47	mg/L	0.02	E200.8	08/01/13 13:57	JRH	7439-89-6	
Manganese	0.069	mg/L	0.005	E200.8	07/31/13 21:42	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/29/13 17:01	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 21:42	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 13:57	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/06/13 18:36	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 18:36	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 18:36	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/06/13 18:36	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/06/13 18:36	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/06/13 18:36	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 18:36	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/06/13 18:36	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/06/13 18:36	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57403.06 (continued)

Sample Tag: MW-2-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	08/06/13 18:36	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/06/13 18:36	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/06/13 18:36	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 18:36	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 18:36	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 18:36	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 18:36	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	105-67-9	
Dimethyl phthalate	11	ug/L	5	SW8270C	08/06/13 18:36	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/06/13 18:36	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 18:36	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 18:36	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/06/13 18:36	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/06/13 18:36	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 18:36	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 18:36	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 18:36	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 18:36	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/06/13 18:36	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 18:36	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/06/13 18:36	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 21:32	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 21:32	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S57403.06 (continued)

Sample Tag: MW-2-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 21:32	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 21:32	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 21:32	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 21:32	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 21:32	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 21:32	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S57403.06 (continued)

Sample Tag: MW-2-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:32	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 21:32	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57403.07
Sample Tag: MW-10-12
Collected Date/Time: 07/25/2013 12:57
Matrix: Groundwater
COC Reference: 74941

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.5	IR
3	40ml Glass	HCL	Yes	5.5	IR
1	125ml Plastic	HNO3	Yes	5.5	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/31/13 23:53	EMR		
Mercury Digestion	Completed			E245.1	07/29/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 14:00	JRH		
pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Metals

Aluminum	0.011	mg/L	0.005	E200.8	08/01/13 14:07	JRH	7429-90-5	
Arsenic	0.051	mg/L	0.002	E200.8	07/31/13 21:53	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 21:53	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 21:53	JRH	7440-47-3	
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 21:53	JRH	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 21:53	JRH	7440-50-8	
Iron	11.2	mg/L	0.02	E200.8	08/01/13 14:07	JRH	7439-89-6	
Manganese	1.64	mg/L	0.005	E200.8	07/31/13 21:53	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/29/13 17:13	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 21:53	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 14:07	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/06/13 19:05	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 19:05	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 19:05	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/06/13 19:05	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/06/13 19:05	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/06/13 19:05	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 19:05	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/06/13 19:05	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/06/13 19:05	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57403.07 (continued)

Sample Tag: MW-10-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	08/06/13 19:05	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/06/13 19:05	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/06/13 19:05	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 19:05	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 19:05	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 19:05	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 19:05	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	105-67-9	
Dimethyl phthalate	10	ug/L	5	SW8270C	08/06/13 19:05	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/06/13 19:05	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 19:05	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 19:05	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/06/13 19:05	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/06/13 19:05	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 19:05	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 19:05	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 19:05	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 19:05	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/06/13 19:05	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 19:05	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/06/13 19:05	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 21:53	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 21:53	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S57403.07 (continued)

Sample Tag: MW-10-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 21:53	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 21:53	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 21:53	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 21:53	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 21:53	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 21:53	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S57403.07 (continued)

Sample Tag: MW-10-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 21:53	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 21:53	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57403.08
Sample Tag: MW-1-12
Collected Date/Time: 07/25/2013 15:05
Matrix: Groundwater
COC Reference: 74941

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.5	IR
3	40ml Glass	HCL	Yes	5.5	IR
1	125ml Plastic	HNO3	Yes	5.5	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Extraction / Prep.								
BNA Extraction	Completed			3510C	07/31/13 23:53	EMR		
Mercury Digestion	Completed			E245.1	07/29/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 14:00	JRH		
pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Metals

Aluminum	0.349	mg/L	0.005	E200.8	08/01/13 14:00	JRH	7429-90-5
Arsenic	Not detected	mg/L	0.002	E200.8	07/31/13 21:46	JRH	7440-38-2
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 21:46	JRH	7440-43-9
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 21:46	JRH	7440-47-3
Cobalt	Not detected	mg/L	0.005	E200.8	07/31/13 21:46	JRH	7440-48-4
Copper	0.005	mg/L	0.004	E200.8	07/31/13 21:46	JRH	7440-50-8
Iron	0.38	mg/L	0.02	E200.8	08/01/13 14:00	JRH	7439-89-6
Manganese	0.018	mg/L	0.005	E200.8	07/31/13 21:46	JRH	7439-96-5
Mercury	Not detected	mg/L	0.0002	E245.1	07/29/13 17:15	CCM	7439-97-6
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 21:46	JRH	7440-62-2
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 14:00	JRH	7440-66-6

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	83-32-9
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	208-96-8
Anthracene	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	120-12-7
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/06/13 19:35	PL	56-55-3
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 19:35	PL	205-99-2
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 19:35	PL	207-08-9
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/06/13 19:35	PL	191-24-2
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/06/13 19:35	PL	50-32-8
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	111-91-1
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	111-44-4
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	108-60-1
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	117-81-7
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	101-55-3
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	85-68-7
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/06/13 19:35	PL	106-47-8
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	91-58-7
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	59-50-7
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 19:35	PL	95-57-8
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	7005-72-3
Chrysene	Not detected	ug/L	1	SW8270C	08/06/13 19:35	PL	218-01-9
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/06/13 19:35	PL	3/4-Cresol



Analytical Laboratory Report

Lab Sample ID: S57403.08 (continued)

Sample Tag: MW-1-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	08/06/13 19:35	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/06/13 19:35	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/06/13 19:35	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 19:35	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 19:35	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 19:35	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 19:35	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	105-67-9	
Dimethyl phthalate	6	ug/L	5	SW8270C	08/06/13 19:35	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/06/13 19:35	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 19:35	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 19:35	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/06/13 19:35	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/06/13 19:35	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 19:35	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 19:35	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 19:35	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 19:35	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/06/13 19:35	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 19:35	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/06/13 19:35	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 22:14	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 22:14	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S57403.08 (continued)

Sample Tag: MW-1-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 22:14	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 22:14	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 22:14	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 22:14	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 22:14	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 22:14	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S57403.08 (continued)

Sample Tag: MW-1-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:14	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 22:14	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57403.09
Sample Tag: MW-6-12
Collected Date/Time: 07/25/2013 15:35
Matrix: Groundwater
COC Reference: 74941

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
2	1L Amber	None	Yes	5.5	IR
3	40ml Glass	HCL	Yes	5.5	IR
1	125ml Plastic	HNO3	Yes	5.5	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

BNA Extraction	Completed			3510C	07/31/13 23:53	EMR		
Mercury Digestion	Completed			E245.1	07/29/13 12:00	CCM		
Metal Digestion	Completed			3015A	07/31/13 14:00	JRH		
pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Metals

Aluminum	0.011	mg/L	0.005	E200.8	08/01/13 14:04	JRH	7429-90-5	
Arsenic	0.010	mg/L	0.002	E200.8	07/31/13 21:50	JRH	7440-38-2	
Cadmium	Not detected	mg/L	0.0005	E200.8	07/31/13 21:50	JRH	7440-43-9	
Chromium	Not detected	mg/L	0.005	E200.8	07/31/13 21:50	JRH	7440-47-3	
Cobalt	0.007	mg/L	0.005	E200.8	07/31/13 21:50	JRH	7440-48-4	
Copper	Not detected	mg/L	0.004	E200.8	07/31/13 21:50	JRH	7440-50-8	
Iron	7.42	mg/L	0.02	E200.8	08/01/13 14:04	JRH	7439-89-6	
Manganese	3.88	mg/L	0.005	E200.8	07/31/13 21:50	JRH	7439-96-5	
Mercury	Not detected	mg/L	0.0002	E245.1	07/29/13 17:17	CCM	7439-97-6	
Vanadium	Not detected	mg/L	0.004	E200.8	07/31/13 21:50	JRH	7440-62-2	
Zinc	Not detected	mg/L	0.005	E200.8	08/01/13 14:04	JRH	7440-66-6	

Organics - Semi-Volatiles

Semi-Volatile Organics - MDEQ

Acenaphthene	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	83-32-9	
Acenaphthylene	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	208-96-8	
Anthracene	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	120-12-7	
Benzo(a)anthracene	Not detected	ug/L	1	SW8270C	08/06/13 20:04	PL	56-55-3	
Benzo(b)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 20:04	PL	205-99-2	
Benzo(k)fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 20:04	PL	207-08-9	
Benzo(ghi)perylene	Not detected	ug/L	1	SW8270C	08/06/13 20:04	PL	191-24-2	
Benzo(a)pyrene	Not detected	ug/L	1	SW8270C	08/06/13 20:04	PL	50-32-8	
bis(2-Chloroethoxy)methane	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	111-91-1	
bis(2-Chloroethyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	111-44-4	
bis(2-Chloroisopropyl)ether	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	108-60-1	
bis(2-Ethylhexyl)phthalate	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	117-81-7	
4-Bromophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	101-55-3	
Butyl benzyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	85-68-7	
4-Chloroaniline	Not detected	ug/L	10	SW8270C	08/06/13 20:04	PL	106-47-8	
2-Chloronaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	91-58-7	
4-Chloro-3-methylphenol	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	59-50-7	
2-Chlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 20:04	PL	95-57-8	
4-Chlorophenyl phenyl ether	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	7005-72-3	
Chrysene	Not detected	ug/L	1	SW8270C	08/06/13 20:04	PL	218-01-9	
p,m-Cresol	Not detected	ug/L	20	SW8270C	08/06/13 20:04	PL	3/4-Cresol	



Analytical Laboratory Report

Lab Sample ID: S57403.09 (continued)

Sample Tag: MW-6-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Semi-Volatiles (continued)								
Semi-Volatile Organics - MDEQ (continued)								
o-Cresol	Not detected	ug/L	10	SW8270C	08/06/13 20:04	PL	95-48-7	
Dibenzo(ah)anthracene	Not detected	ug/L	2	SW8270C	08/06/13 20:04	PL	53-70-3	
Dibenzofuran	Not detected	ug/L	4	SW8270C	08/06/13 20:04	PL	132-64-9	
di-n-Butyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	84-74-2	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 20:04	PL	95-50-1	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 20:04	PL	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8270C	08/06/13 20:04	PL	106-46-7	
3,3'-Dichlorobenzidine	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	91-94-1	
2,4-Dichlorophenol	Not detected	ug/L	10	SW8270C	08/06/13 20:04	PL	120-83-2	
Diethyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	84-66-2	
2,4-Dimethylphenol	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	105-67-9	
Dimethyl phthalate	5	ug/L	5	SW8270C	08/06/13 20:04	PL	131-11-3	
4,6-Dinitro-2-methylphenol	Not detected	ug/L	20	SW8270C	08/06/13 20:04	PL	534-52-1	
2,4-Dinitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 20:04	PL	51-28-5	
2,4-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	121-14-2	
2,6-Dinitrotoluene	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	606-20-2	
1,2-Diphenylhydrazine	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	122-66-7	
di-n-Octyl phthalate	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	117-84-0	
Fluoranthene	Not detected	ug/L	1	SW8270C	08/06/13 20:04	PL	206-44-0	
Fluorene	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	86-73-7	
Hexachlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	118-74-1	
Hexachlorobutadiene	Not detected	ug/L	10	SW8270C	08/06/13 20:04	PL	87-68-3	
Hexachlorocyclopentadiene	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	77-47-4	
Hexachloroethane	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	67-72-1	
Indeno(1,2,3-cd)pyrene	Not detected	ug/L	2	SW8270C	08/06/13 20:04	PL	193-39-5	
Isophorone	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	78-59-1	
2-Methylnaphthalene	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	91-57-6	
Naphthalene	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	91-20-3	
2-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 20:04	PL	88-74-4	
3-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 20:04	PL	99-09-2	
4-Nitroaniline	Not detected	ug/L	25	SW8270C	08/06/13 20:04	PL	100-01-6	
Nitrobenzene	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	98-95-3	
2-Nitrophenol	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	88-75-5	
4-Nitrophenol	Not detected	ug/L	25	SW8270C	08/06/13 20:04	PL	100-02-7	
N-Nitrosodiphenylamine	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	86-30-6	
N-Nitrosodi-n-propylamine	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	621-64-7	
Pentachlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	87-86-5	
Phenanthrene	Not detected	ug/L	2	SW8270C	08/06/13 20:04	PL	85-01-8	
Phenol	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	108-95-2	
Pyrene	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	129-00-0	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	120-82-1	
2,4,5-Trichlorophenol	Not detected	ug/L	5	SW8270C	08/06/13 20:04	PL	95-95-4	
2,4,6-Trichlorophenol	Not detected	ug/L	4	SW8270C	08/06/13 20:04	PL	88-06-2	
Organics - Volatiles								
Volatile Organics - DEQ List								
Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 22:35	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 22:35	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	74-88-4	



Analytical Laboratory Report

Lab Sample ID: S57403.09 (continued)

Sample Tag: MW-6-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 22:35	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 22:35	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 22:35	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 22:35	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 22:35	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	106-93-4	
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 22:35	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	108-67-8	



Analytical Laboratory Report

Lab Sample ID: S57403.09 (continued)

Sample Tag: MW-6-12

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 22:35	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 22:35	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57403.10
Sample Tag: Trip Blank 3
Collected Date/Time: 07/25/2013 00:01
Matrix: Liquid
COC Reference: 74941

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	5.5	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 17:02	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 17:02	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 17:02	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 17:02	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 17:02	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 17:02	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 17:02	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	106-93-4	



Analytical Laboratory Report

Lab Sample ID: S57403.10 (continued)

Sample Tag: Trip Blank 3

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 17:02	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:02	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 17:02	JGH	91-57-6	



Analytical Laboratory Report

Lab Sample ID: S57403.11
Sample Tag: Trip Blank 4
Collected Date/Time: 07/25/2013 00:01
Matrix: Liquid
COC Reference: 74941

Sample Containers

#	Type	Preservative(s)	Refrigerated?	Arrival Temp. (C)	Thermometer #
1	40ml Glass	HCL	Yes	5.5	IR

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags

Extraction / Prep.

pH check for VOCs	<2	STD Units		N/A	08/07/13 10:30	LBR		

Organics - Volatiles

Volatile Organics - DEQ List

Diethyl ether	Not detected	ug/L	10	SW8260B	08/06/13 17:22	JGH	60-29-7	
Acetone	Not detected	ug/L	50	SW8260B	08/06/13 17:22	JGH	67-64-1	
Methyl iodide	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	74-88-4	
Carbon disulfide	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	75-15-0	
tert-Methyl butyl ether (MTBE)	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	1634-04-4	
Acrylonitrile	Not detected	ug/L	2	SW8260B	08/06/13 17:22	JGH	107-13-1	
2-Butanone (MEK)	Not detected	ug/L	25	SW8260B	08/06/13 17:22	JGH	78-93-3	
Dichlorodifluoromethane	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	75-71-8	
Chloromethane	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	74-87-3	
Vinyl chloride	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	75-01-4	
Bromomethane	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	74-83-9	
Chloroethane	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	75-00-3	
Trichlorofluoromethane	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	75-69-4	
1,1-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	75-35-4	
Methylene chloride	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	75-09-2	
trans-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	156-60-5	
1,1-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	75-34-3	
cis-1,2-Dichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	156-59-2	
Tetrahydrofuran	Not detected	ug/L	90	SW8260B	08/06/13 17:22	JGH	109-99-9	
Chloroform	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	67-66-3	
Bromochloromethane	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	74-97-5	
1,1,1-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	71-55-6	
4-Methyl-2-pentanone (MIBK)	Not detected	ug/L	50	SW8260B	08/06/13 17:22	JGH	108-10-1	
2-Hexanone	Not detected	ug/L	50	SW8260B	08/06/13 17:22	JGH	591-78-6	
Carbon tetrachloride	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	56-23-5	
Benzene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	71-43-2	
1,2-Dichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	107-06-2	
Trichloroethene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	79-01-6	
1,2-Dichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	78-87-5	
Bromodichloromethane	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	75-27-4	
Dibromomethane	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	74-95-3	
cis-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	10061-01-5	
Toluene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	108-88-3	
trans-1,3-Dichloropropene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	10061-02-6	
1,1,2-Trichloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	79-00-5	
Tetrachloroethene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	127-18-4	
trans-1,4-Dichloro-2-butene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	110-57-6	
Dibromochloromethane	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	124-48-1	
1,2-Dibromoethane	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	106-93-4	



Analytical Laboratory Report

Lab Sample ID: S57403.11 (continued)

Sample Tag: Trip Blank 4

Analysis	Results	Units	RL	Method	Run Date/Time	Analyst	CAS #	Flags
Organics - Volatiles (continued)								
Volatile Organics - DEQ List (continued)								
Chlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	108-90-7	
1,1,1,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	630-20-6	
Ethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	100-41-4	
p,m-Xylene	Not detected	ug/L	2	SW8260B	08/06/13 17:22	JGH		
o-Xylene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	95-47-6	
Styrene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	100-42-5	
Isopropylbenzene	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	98-82-8	
Bromoform	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	75-25-2	
1,1,2,2-Tetrachloroethane	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	79-34-5	
1,2,3-Trichloropropane	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	96-18-4	
n-Propylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	103-65-1	
Bromobenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	108-86-1	
1,3,5-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	108-67-8	
tert-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	98-06-6	
1,2,4-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	95-63-6	
sec-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	135-98-8	
p-Isopropyltoluene	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	99-87-6	
1,3-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	541-73-1	
1,4-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	106-46-7	
1,2-Dichlorobenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	95-50-1	
1,2,3-Trimethylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	526-73-8	
n-Butylbenzene	Not detected	ug/L	1	SW8260B	08/06/13 17:22	JGH	104-51-8	
Hexachloroethane	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	67-72-1	
1,2-Dibromo-3-chloropropane	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	96-12-8	
1,2,4-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	120-82-1	
1,2,3-Trichlorobenzene	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	87-61-6	
Naphthalene	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	91-20-3	
2-Methylnaphthalene	Not detected	ug/L	5	SW8260B	08/06/13 17:22	JGH	91-57-6	

Merit

Laboratories, Inc.

2680 East Lansing Dr., East Lansing, MI 48823
 Phone (517) 332-0167 Fax (517) 332-4034
 www.meritlabs.com

C.O.C. PAGE # _____ OF _____

74941

REPORT TO

CHAIN OF CUSTODY RECORD

INVOICE TO

CONTACT NAME SUE GRAVES		
COMPANY ERG		
ADDRESS 28003 CENTER OAKS CT. STE 106		
CITY WIXOM	STATE MI	ZIP CODE 48393
PHONE NO. 248.766.1648	FAX NO. 248.924.3108	P.O. NO.
E-MAIL ADDRESS sue.graves@ergp.net		QUOTE NO.

CONTACT NAME DAVID FAVERO		☐ SAME
COMPANY RACER		
ADDRESS 2930 ECORSE RD		
CITY YPSILANTI	STATE MI	ZIP CODE 48198
PHONE NO. 248.741.6235	E-MAIL ADDRESS d.favero@racertrust.org	

ANALYSIS (ATTACH LIST IF MORE SPACE IS REQUIRED)

PROJECT NO./NAME RACEE Dawson Rd Landfill	SAMPLER(S) - PLEASE PRINT/SIGN NAME LAURA LAMBERT
TURNAROUND TIME REQUIRED ☐ 1 DAY ☐ 2 DAYS ☐ 3 DAYS ☒ STANDARD ☐ OTHER _____	
DELIVERABLES REQUIRED ☐ STD ☐ LEVEL II ☐ LEVEL III ☐ LEVEL IV ☐ EDD ☐ OTHER _____	

MATRIX CODE:	GW=GROUNDWATER SL=SLUDGE	WW=WASTEWATER DW=DRINKING WATER	S=SOIL O=OIL	L=LIQUID WP=WIPE	SD=SOLID A=AIR	W=WASTE

Containers & Preservatives

MERIT LAB NO. FOR LAB USE ONLY	YEAR		SAMPLE TAG IDENTIFICATION-DESCRIPTION	MATRIX	# OF BOTTLES	# Containers & Preservatives										VOCs		SVOCs		Al, As, Cd, Co, Cu, Cr, Fe, Hg, Mn, Ni, Pb, Se, V, Zn										☐ Other _____	Special Instructions																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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RELINQUISHED BY: SIGNATURE/ORGANIZATION Laura Lambert ERG	☒ Sampler	DATE 7/26/13	TIME 10:35
RECEIVED BY: SIGNATURE/ORGANIZATION ERG		DATE 7/26/13	TIME 10:35
RELINQUISHED BY: SIGNATURE/ORGANIZATION ERG		DATE 7-26-13	TIME 11:00
RECEIVED BY: SIGNATURE/ORGANIZATION ERG		DATE 7-26-13	TIME 11:10

RELINQUISHED BY: SIGNATURE/ORGANIZATION David Favero RACER	DATE 7-26-13	TIME 10:35
RECEIVED BY: SIGNATURE/ORGANIZATION David Favero	DATE 7-26-13	TIME 13:20
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
SEAL NO.	SEAL INTACT YES ☐ NO ☐	INITIALS
NOTES:		TEMP. ON ARRIVAL 56

PLEASE NOTE: SIGNING ACKNOWLEDGES ADHERENCE TO MERIT'S SAMPLE ACCEPTANCE POLICY ON REVERSE SIDE